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THE

CANADA MEDICAL RECORD:

A Monthly Journal of Medicine, Surgery and Pharmacy.

EDITORS:

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VOL. XIV.

October, 1885, to September, 1886.

Montreal:
PRINTED BY JOHN LOVELL & SON.

1886.

CONTENTS.

ORIGINAL COMMUNICATIONS.

PAGE

A. C. E. Mixture. The ... 337
Bright's Disease. Chronic ... 401
Ephemeral Fever. Weid or ... 403
Gynæcological Report ... 313
Hæmoptysis ... 579
Lecture at the Pennsylvania Hospital, Philadelphia. Clinical ... 361
Lecture. Clinical ... 441, 505, 529, 553, 579, 607
Medical Association, President's Address. Canada ... 583
Medico-Chirurgical Society of Montreal ... 484
Myalgia ... 581
Prostitution and its relations to the Public Health. The Question of ... 289
Sciatica ... 607
Tongue. Amputation of the ... 444
Valedictory Address to Graduates ... 481
Whooping Cough. The Quinine Treatment of ... 605
Yellow Fever. Report of the Etiology and the Preventative Vaccination of ... 577

SOCIETY PROCEEDINGS.

Canadian Medical Association ... 595
Medical Association. Canadian ... 589
Montreal Medico-Chirurgical Society. 314, 445, 531, 555, 589

PROGRESS OF SCIENCE.

Abortion at the Fourth or Fifth Month, with retained Placenta. Treatment of ... 376
Abscess. The Prevention of Mammary ... 521
Acne. Bromide of Arsenic in ... 418
Æsophagus. Foreign Bodies in the ... 423
Alopecia. Prescription for ... 354, 602
Amenorrhœa ... 494
Amenorrhœa and Dysmenorrhœa. Santonine in ... 381
Anæmia and Atrophic Conditions. The Therapeutic Value of Arsenic in ... 351
Anæsthetics. On ... 364
Angina Pectoris by the Iodide of Sodium. Treatment of 349
Ani. Nux Vomica in Prolapsus ... 550
Antimonials. Notes on the Use of ... 405
Anus without Operation. Treatment of Painful Fissure of the ... 548
Aphasia ... 327
Artificial Respiration in Cases of Stillbirth and of Apparent Death after Tracheotomy. Some Points in the Practice of ... 520
Asphyctic New-Born Children. Schultze's Swinging Motions to Revive ... 495
Asthma. The Cure of ... 549
Asthma. The Prophylaxis of ... 544
Asthma. The Treatment of ... 380
Baldness. The Prevention of ... 517
Belladonna and Iodide of Potassium ... 381
Belladonna. Some of Its Therapeutic Uses ... 454

PAGE.

Biliary Colic. Jaundice and Pain in ... 380
Bleeding. Novel Method of ... 422
Bowel Diseases in Children. Irrigation in ... 538
Breast. Iodide of Potassium in Inflamed ... 331
Breech Presentation. Management of ... 546
Bright's Disease. The Elements of Prognosis in ... 375
Bright's Disease. The Treatment of Chronic ... 347
Bronchitis. Treatment of Acute Infantile ... 507, 535
Cæsarean Section after Death of Mother, Living Child Removed. Case of ... 379
Calcium. On the Therapeutic Value of the Chloride of 372
Cancer of the Uterus ... 373
Carbuncle. Tannin as a Specific for ... 330
Cardiac and Renal Diseases. Nitro-Glycerine, Nitrite of Amyl and Nitrite of Sodium in ... 357
Cardiac Weakness. On ... 307
Catheters ... 423
Catheter. A Painless Method of Introducing the ... 550
Cerebral Hemorrhage, Thrombosis and Embolism. The Use of Carbonate of Ammonia in ... 353
Chancroid. Treatment of the ... 516
Cholera Infantum. Therapeutics of ... 369
Cholera. Treatment of ... 496
Chorea Successfully Treated with Hyoscyamine ... 493
Constipation. Cascara and Chronic Functional ... 460
Constipation Habit ... 419
Consumption. The Curability of ... 367
Consumption. The Influence of High Altitudes upon Pulmonary ... 324
Consumption. Treatment of Pulmonary ... 498
Corpulence on Physiological Principles. The Treatment of ... 350
Coryza. Brief Notes on the Treatment of Acute ... 374
Cough ... 488
Cough of Children. The Nocturnal ... 497
Cough Mixture. Efficient Sedative ... 624
Croup. Bichloride of Mercury in Diphtheria and ... 346
Croup, Diphtheritic Croup, True Croup. Membranous. 353
Croup. Pilocarpine in ... 356
Croup. The Specific Treatment of Diphtheria and ... 456
Croup with Muriate of Pilocarpine. Treatment of ... 421
Cystitis. Chronic ... 616
Dermatology ... 574, 625
Diabetes Mellitus Successfully Treated with Boracic Acid ... 520
Diarrhœa and Dysentery in Children ... 514
Diarrhœa and Feeding Bottles ... 549
Dietary in Acute Diseases. The ... 622
Diet for the Sick ... 462
Digestion. Disorders of ... 304
Diphtheria and Croup. Bichloride of Mercury in ... 346
Diphtheria and Croup. The Specific Treatment of ... 456
Diphtheria. Instructions concerning the Management of 355
Dislocations of the Hip. A New Method of Reducing. 379
Diuretic. Water as a ... 496
Doses. Memorizing ... 624

PAGE

Dover's Powder and its Modifications 522
Dover's Powder. Modifications of 523
Dysentery in Children. Diarrhœa and 514
Dysmenorrhœa. Santonine in Amenorrhœa and 381
Dysmenorrhœa. The Treatment of Membranous 418
Earache. A Liniment for 550
Ear. A New Method of Applying Remedies to the 417
Ear of a Child. A Cherry-Pit in the 459
Eczema. Treatment of 358
Epilepsy. Drunkards' 554
Epilepsy. Simulo in 345
Epilepsy. The Importance of Shampooing and Gymnastic Exercise in the Treatment of 326
Epilepsy. The Treatment of 550
Epilepsy with Borax. The Treatment of 549
Epistaxis. Bleeding from the Nose or 618
Epistaxis. The Treatment of 331
Furuncles. On the Treatment of 513
Gall Stones. The Surgical Treatment of 352
Gastric Disturbance. Glycerine in 350
Gastro-Intestinal Indigestion 462
Gonorrhœa. Belladonna Injection for 351
Gonorrhœa Easily Cured 348
Gonorrhœa in the Female. How to Diagnose 355
Hæmoptysis. Opium in 349
Hæmoptysis. The Treatment of Profuse 515
Hæmorrhage. To Arrest Nasal 572
Hæmorrhoids 381
Headache 511
Headache. The Treatment of 602
Headache. The Treatment of Sick 358
Heart Disease. The Treatment of Chronic 623
Heart. Weak 457
Hepatic Disorders. Fothergill on 372
Hiccough relieved by Nitro-Glycerine. A Case of Obstinate 371
Hip. A New Method of Reducing Dislocations of the 379
Hysterical Attack. Treatment of the 623
Incontinence of Urine in Children. Remarks on 329, 356, 614
Indigestion. Carbolic Acid in 331
Indigestion. The Dietary in 539
Ingluvin 613
Inhalant. Useful 352
Insomnia. Cold Bandaging of the Leg in 571
Intermittent Fever. Nitro-Glycerine in the Cold Stage of 519
Iodoform. Deodorized 461
Labor. Induction of Premature 550
Laryngitis. The Treatment of Acute 373
Lecture. Clinical 486
Leucorrheal Discharge from Roller-Skating 380
Liver. Medicines which stimulate the 331
Lupus. Treatment of 416
Medicants. On some new 377
Meningitis cured by Iodoform. Tubercular 521
Menorrhagia. Hazeline in 346
Metrorrhagia. Hydrastis Canadensis in 571
Migraine. On the Treatment of 328
Nasal Diseases. On the Therapeutics of 414
Nasal Douche. A Simple Form of 420
Naso-Pharyngeal Catarrh. Report of a Case of 355
Neuralgia. Iodoform Collodion in 352
Neuralgia. Soothing Application in 381
Neurasthenia. Food in the Treatment of 541

PAGE

Nightsweats. Treatment of 459
Nipples. Cocaine in the Treatment of Inflamed 308
Nose. A New Method for the Removal of Foreign Bodies from the 517
Nursing 620
Obstetric 547
Otorrhœa. The Treatment of 601
Peritonitis Treated by Abdominal Section. Acute 330
Phthisis between Man and Wife. Transmission of 381
Phthisis. Inhalations in 547
Phthisis. Modern Methods of Treatment of 410
Pigment Spots of the Skin. Treatment of 624
Placenta Prævia. The Management of 516, 548
Pneumonia, Massive Doses of Digitalis in Lobar 520
Pneumonia Treated by Intraparenchymatous Injections 519
Potassium. Belladonna and Iodide of 381
Poultices ever be used after an Abscess or Whitlow has been opened, or to aid the separation of Sloughs? Should 619
Prostatitis. Hot Water in Acute 522
Pruritus of Women 332
Pruritus of Women—Local Treatment 522
Pruritus Vulva 601
Psoriasis. Boroglyceride in 351
Puerperal Hemorrhage. Vinegar in 381
Rectum and Hemorrhoidal Tumors. Safe, Simple and Effective Mode of Treating Prolapse of the 570
Rectum. Feeding by 491
Rectum. The 354
Renal Diseases. Nitro-Glycerine, Nitrite of Amyl and Nitrite of Sodium in Cardiac and 357
Rheumatism. On the Treatment of Acute 363
Ringworm. A Hint on the Treatment of 521
Salve. Delacour's Lip 381
Scabies. Treatment of 550
Scarlet Fever. Desquamation in 346
Sciatica. Hypodermic Injections of Cold Water in 522
Sick. Diet for the 462
Skin Diseases. The Contagious 357
Skin Diseases. Turpentine in 349
Sprains. A New Method of Treating 422
Sterility from Flexion. On the Treatment of Painful Menstruation and 566
Stomach. Buttermilk in Sick 343
Surgery. Chiene's Contributions to Practical 518
Sweating Feet. Bismuth in the Treatment of 497
Sweats. Local Applications for Night 307
Tapeworm. The Treatment of 343
Therapeutic 545
Therapeutic Hints and Approved Formulæ 460
Therapeutic Notes 306
Tonsils by Caustic Applications. How to Shrink Hypertrophied 331
Torticollis 458
Tracheotomy. A Year's Experience in 342
Typhoid Fever, especially with reference to Prognosis. On 300
Typhoid Fever The Treatment of 421
Ulcers of the Leg. Treatment of 345
Urethra. Removal of Foreign Body in the 497
Vaccination 517
Vaccination, the Preservation of Lymph and other Points. A Few Practical Observations on 543
Vagina. Foreign Bodies in the 319

PAGE

Varicose Veins Treated with Hamamelis. Notes of Four Cases of..... 370
Venesection..... 522
Vomiting. Ice to the Spine in Obstinate.....346, 497
Vomiting of Pregnancy..... 382
Vomiting of Pregnancy. Another Treatment for..... 602
Vomiting of Pregnancy. Hydrochlorate of Cocaine in the..... 602
Vulva. Pruritus..... 601
Whooping-Cough. A Mixture for..... 382
Whooping-Cough. Iodised Phenol in the Treatment of 373
Wounds of the Fingers. How to Treat..... 377

EDITORIAL.

Alexander's Operation..... 525
Bishop's College. Fifteenth Annual Convocation of the Medical Faculty of..... 498
Blood Plague. The..... 500
Bovine Vaccine Points 383
Canada Medical Association..... 310, 552, 574, 602
College of Physicians and Surgeons, Province of Quebec.....309, 525, 551, 572, 625
Correspondence.....336, 562, 575, 608, 611
Epidemic. The Origin of the..... 382
Famous Books. Mrs. Southworth's..... 335
Flint. M.D., LL.D., Austin..... 462
Hospital. Montreal General 523

PAGE

International Medical Congress. Officers of the..... 626
Iodoform. New Application of..... 576
Iodoformium Absolutum..... 311
Items. Toronto..... 626
Lactopeptine..... 383
Local and General.....311, 333, 359, 463, 502, 528
Malt. Wyeth's Liquid..... 574
Marsden. Quebec, The Late Dr..... 358
Matrimonial..... 311
McGill Faculty of Medicine..... 310
Medical Association. Canada.....310, 552, 574, 602
Medical Society. Toronto..... 552
Monthly. New York Medical..... 574
New York Medical Monthly..... 574
Obituary..... 312
Ontario Medical Association. The..... 552
Personal..... 312, 335, 384, 500, 527, 627
Peterson's 25 cent Series..... 335
Philadelphia Medical Items..... 575
Quebec College of Physicians and Surgeons. Proposed Change in the..... 524
Scarlet Fever. The Origin of..... 626
Smallpox Epidemic. The.....308, 335, 424
Toronto Medical Society..... 552
Yellow Fever and its Prevention..... 603

REVIEWS.

Reviews.....312, 360, 384, 500, 627

No 1. of 1.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, OCTOBER, 1885. No. 1

BOSTON MEDICAL LIBRARY ASS'N APR 11 1887

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Question of Prostitution and its relations to the Public Health... 289

PROGRESS OF SCIENCE.

On Typhoid Fever, especially with reference to Prognosis..... 300
Disorders of Digestion 304
Therapeutic Notes..... 306
On Cardiac Weakness..... 307
Local Applicat'ns for Night Sweats 307
Cocaine in the Treatment of Inflamed Nipples..... 308

EDITORIAL.

The Small-pox Epidemic 308
College of Physicians & Surgeons, Province of Quebec 309
McGill Faculty of Medicine..... 310
Canada Medical Association..... 310
Matrimonial 311
Iodoformium Absolutum..... 311
Local and General..... 311
Obituary..... 312
Personal 312

REVIEWS.

The Technology of Bacteria Investigation..... 312

Original Communications.

THE QUESTION OF PROSTITUTION AND ITS RELATIONS TO THE PUBLIC HEALTH.

By CASEY A. WOOD, C.M., M.D., M.C.P.S.O., Attending Physician to the Western Hospital, Professor of Pathology in the Medical Faculty, University of Bishop's College.

The revival of the old question—what shall we do to prevent the spread of syphilis?—seems probable. Twenty years ago the advisability of adopting restrictive measures in the treatment of prostitution was discussed with some warmth. The majority that carried the Contagious Diseases Act and that applauded the licensing system is dwindling down, and the belief gains ground that it is more by indirect and moral means that the desired object is to be attained than by legislative measures.

Several papers lately written, notably that by Drs. Allison and Ashton ("The Failure of Legislation in Limiting the spread of Venereal Diseases," read before the Philadelphia County Medical Society, April 22nd, 1885), will be likely to provoke discussion of the whole question. The following article is reprinted as a contribution to such discussion, and as the writer has not since seen fit to change or modify views expressed when it was first written (November, 1880) it is given entire, without further apology.

Whatever action may be taken regarding them by the people at large, whatever influence may be subsequently exerted by public opinion, questions of hygiene are primarily the property of the medical profession. For example, it is rarely that we have to thank the priest, with his time occupied with matters of another world, and caring little for things of earth; nor the statesman, with his attention taken up by affairs apparently more important; nor even the laity, who have ever exemplified the proverb, "what's everybody's business is nobody's business"—we have seldom been indebted to any of these for the inauguration of whatever progress has been made in a single department of sanitary science. No fact could add more to the dignity of our profession, because, in consequence, it must prove to all candid observers that, as a rule, medical men really hope and work for a permanent lessening of the diseases that infect the race.

The statement that the primary discussion of any measure to improve the health of communities and individuals has almost always been introduced by medical men might be supplemented by showing that the conclusions arrived at by them have always formed an important factor in determining action taken by the authorities to remedy the trouble under consideration. It is a fortunate circumstance, perhaps, that such is the case in the questions about to be ventilated in this article, for the same spirit of false modesty which prevents a proper discussion by the laity of many a vital question affecting the social economy has relegated the treatment of prostitution and its attendant evils to whomsoever cares to occupy himself with it. With this double warrant there can be no reason why the matter should not be freely and fully discussed in the pages of a medical journal, no reason why the medical scientist should not decide what measures will have the greatest influence in

limiting the spread of prostitution and in neutralizing those moral and physical maladies it so uniformly gives rise to.

"*Fornicatio autem——nec nominetur in vobis sicut decet sanctos*," wrote Paul to the little church at Ephesus, but probably he never imagined that in later times a whole people would arise who, while tacitly ignoring the spirit, would scrupulously insist upon its *literal* obedience! But only in these latter days, for, "in the good old days when George the Third was king," Fielding was the popular novelist, and everyone read and openly discussed the questionable ways and doings of his heroes and heroines. Nobody then saw harm in reading Richardson (who, by the way, was a clergyman), nor is it probable that any great harm came of it because of that very fact. There were no "expurgated" editions of Shakespeare then, because it was held that to call a "spade" by any other than its proper name was quite unnecessary and likely to mislead. The author of "Vanity Fair" frequently draws one's attention to this change in public sentiment. For instance: "Ladies, I do not say that you are a society of vestals,—but the chronicle of a hundred years since contains such an amount of scandal that you may be thankful you did not live in such dangerous times. No, on my conscience, I believe that men and women are both better; not only that the Susannahs are more numerous, but that the Elders are not nearly so wicked. Did you ever hear of such books as 'Clarissa,' 'Tom Jones,' 'Roderick Random;' paintings by contemporary artists of the men and women, the life and society of their day? Suppose we were to describe the doings of such a person as Mr. Lovelace, or my Lady Bellaston, or that wonderful 'Lady of Quality,' who lent her memoirs to the author of 'Peregrine Pickle." How the pure and outraged nineteenth century would blush, scream, run out of the room, call away the young ladies, and order Mr. Mudie never to send one of that odious author's books again! You are fifty-eight years old, Madam, and it may be that you are too squeamish, that you cry out before you are hurt, and when nobody has any intention of offending your Ladyship. Also, it may be that the novelist's art is injured by the restraints put upon him, as many a harmless honest statue at St. Peters and the Vatican is spoiled by the tin draperies in which ecclesiastical old women have swaddled the fair limbs of the marble. But in your prudery there is reason. So there is in the state censorship of the Press. The pages may contain matter injurious to *bonos mores*. Out with your scissors, censor, and clip off the prurient paragraph!" *

While we may believe with Thackeray, that people now-a-days are "of a cleaner conversation," we cannot close our eyes to the fact that, if we do not hear of and see so much moral uncleanness it is, to some extent, because it is disguised and hidden, and not because it has ceased to exist.

It is tolerated, but not recognized, or at least only recognized under certain conventional forms. Society is quite candid in this matter. One is not positively commanded not to eat of the forbidden fruit, but the meal must be taken *en règle* and respectably. Shakespeare's poems, the tales of Boccaccio, and the wonderful adventures of Gulliver "smell to heaven," and are altogether detestable—*cela va sans dire*—but, without giving offence, you may (if you judiciously avoid particulars) discuss the merits of Alexandre Dumas and Emile Zola. Or, if it happens that you have a taste for lighter literature, what popular novels will more quickly satisfy that literary appetite than the *entrées* and dessert served up by Rhoda Broughton and "Ouida?"

Nor need you pay much attention to the abuse they have received from the discontented few, for has not Madame Grundy taken these productions under her protection? Is not "socially authorized" stamped on each title-page? What right then have men like Goodell to call them "nambypamby trash" and "printed erysipelas?"

This attitude of society towards *open* discussion of the evils that threaten to undermine the foundations of its structure, has a more practical bearing upon attempts to remedy the evils themselves than is apparent at first sight, because, while it very properly negatives gross and immodest conversation, it has always displayed an unfortunate lack of discrimination in including in the proscription agitations having for their object the eradication of the maladies.

And this absence of a becoming discernment is nowhere more marked than when the trade of the strumpet is under consideration. Here prudery might be forgiven if honest investigation were permitted. But it is not, and has not been, and we are consequently obliged to believe with Charlotte Bronté that "to such grievances as society

* Thackeray's "Virginians, chap. xli.

cannot readily cure it usually forbids utterance on pain of its scorn ; this scorn being only a sort of tinseled cloak to its deformed weakness."*

Starting out then with the premise that the endeavor to solve the problem of the social evil must not be hampered either by the opinions or prejudices of the classes for whom the work is undertaken, or by the neutrality of other classes whom we might have expected to have been ardent workers with us, it is yet pardonable to say without the slightest feeling of bitterness, and almost without a sentiment of disappointment, that there is an additional reason why the profession should not shun this particular labor of mercy, for is it not one of its daily functions to minister to the despised, the wretched and the unclean in every shape? Bearing in mind the story related by a Physician who in his day had seen "pass by on the other side" the priest and the Levite, we need not wonder that the "cry of those who have wounds without cause" should still insult their sanctified ears ; that it should still be left to less fastidious hands to pour in the wine and the oil—to less worthy brains to work out the poor enigmas of our lot! In the case of the man of Samaria we may comfort ourselves with the reflection that his charity probably did not seriously diminish *his* income, and that there was no contumely connected with *his* act of mercy!

Three queries, it appears to the writer, cover the whole ground included in the heading of this article. Side issues, important from other standpoints, force themselves on one's notice and, while it is impossible always to avoid or ignore them, because they are so intimately bound up with the causes and effects of every social disturbance, they can receive but a passing mention in the space so necessarily limited as the pages of a journal devoted to medical science. (1) Is it possible to repress *in toto* houses of ill-fame and assignation? (2) If it were possible to suppress *les maisons des dames*, would it be wise to make the attempt? (3) In the event of prohibition failing to accomplish its object, what measures are most likely to limit the evil of prostitution and to curtail the misery and disease it engenders?

It is difficult to separate the first two questions, and they may be answered together. The history of every nation that has reached a high state of civilization furnishes us with stories of endeavors made by the State to wipe out the immediate sources of prostitution, and these attempts are both interesting and instructive.

In the early history of the Greeks we find that one of their laws, incorporated in the code of Draco, imposed the death penalty on adultery. If severity could have accomplished the desired end it ought to have done so in this instance, but so powerless did it prove that Solon, seeing the futility of the measure, established by law houses of prostitution at Athens, and filled them with slaves bought by the public money. These *Dictera*, as they were called, being in a sense public servants, handed over their miserable earnings to the State, and naturally assisted in increasing its revenue. The Romans, wiser in their generation, and profiting, in all probability, by the experience of their Grecian neighbors, seem never to have attempted to wipe out the calling of the harlot. Tacitus tells us that long before his time the prostitute was obliged to register herself at the ædile's office, where she received a license—*stupri licentia*—in a similar manner and almost upon the same terms as those imposed by existing French laws regulating brothels and their inmates. It must be observed, also, that the Romans exacted in their code the penalty that modern society imposes by its unwritten law upon the unfortunate erring one ; it closed every avenue to reform. "Once a prostitute, always a prostitute," is a Roman proverb.

Passing to more modern times an instructive lesson may be learned from early attempts to suppress prostitution in France. Sanger, in his admirable work on the subject, tells us that Louis IX. made the first serious endeavor to stem the rising tide of evil in his dominions.

"His edict, which dates from 1254, directed that all prostitutes, and persons making a living indirectly out of prostitution, such as brothel-keepers and procurers, should be forthwith exiled out of the kingdom. It was partially put in force : a large number of unfortunate females were seized and imprisoned or sent across the frontier ; severe punishments were inflicted on those who returned to the city of Paris after their expulsion. A panic seized the customers of brothels, and for a few months public decency was restored. But the inevitable consequences of the arbitrary decree of the King soon began to be felt.

"Though the officers of justice had forcibly confined in establishments resembling Magdalen hospitals a large proportion of the most notorious pros-

* "Shirley."

titutes, and exiled many more, others arose to take their places. *A clandestine traffic succeeded to the former open debauchery*, and in the dark the evils of the disease were necessarily aggravated. More than that, as has usually been the case when prostitution has been violently and suddenly suppressed, the number of virtuous women became less, and corruption invaded the family circle. Tradesmen complained that since the passage of the ordinance they found it impossible to guard the virtue of their wives and daughters against the enterprises of the military and the students. At last complaints of the evil effects of the ordinance became so general and so pressing that, after a lapse of two years, it was repealed. A new royal decree re-established prostitution under rules, which, though not particularly enlightened and humane, still placed it on a sounder footing than it had occupied before the royal attention had been directed to the subject." *

Charles IX., in 1560, published an edict prohibiting the opening or keeping of any house of reception for prostitutes in Paris. Here was an instance, it is said, of the actual suppression of the traffic in a large city, but the cure was infinitely worse than the disease, for secret debauchery and seduction took the place of open sin. Society became at last so corrupt that a prominent Huguenot clergyman named Cayet, *advocated the re-opening of the brothels in the interests of public morals.* Twenty-eight years afterwards Henry III. reaffirmed the ordinance established by Charles, and in 1635 the law was made still more rigorous, but it does not appear that the illicit commerce was ever seriously diminished or the interests of morality sensibly advanced.

These French prohibitory laws have a melancholy interest for us, because a wise, paternal government at home (in answer to an urgent request for female emigrants was enabled, through their provisions, to present the colonists in Canada with wives fresh from the brothel-houses of Paris! The edge is taken off this reflection, however, when we consider that the officials who so considerately furnished the colonials with this class of helpmates were but little better off than their customers; since the adultery and seduction that followed the forced emigration affected in no slight degree the class it was expected to protect, and in many instances penetrated to the families of those who had been guilty of so vile an outrage on the virtue of the colony. So may wrong ever recoil upon the heads of its perpetrators!

In Spain the profligacy of public morals had at one time reached a height hitherto unprecedented, and this state of affairs has been ascribed almost altogether to legislation of the Draconian kind. The history of suppressive measures in Italy tells the same story. Our word *bagnio*, expressive of a house of ill-fame, originated in efforts to root out brothels and punish their inmates. When driven from their usual haunts, loose women were obliged to frequent places of public resort, so that in a short time every keeper of a *bath* became also a brothel-master.

The laws of Hamburg passed through the several phases of suppression, toleration and regulation, until now they present a fair sample of the manner in which most European cities manage their rakes and harlots.

A local writer, arguing in favor of the laws now in force there, speaks thus of repressive measures, and his assertions undoubtedly apply to all other cities: "*Suppression is absolutely impracticable*, inasmuch as the evil is an unconquerable physical requirement. It would seem as if the zeal against public brothels implied that by their extinction a limitation of sexual intercourse, except in marriage, would be effected. This is erroneous, for reliable details prove that for every hundred brothel women there would be two hundred private prostitutes, and no human power could prevent this." *

The Puritan Fathers were in the habit of dealing directly and sharply with social shortcomings. Their laws against adultery and fornication were stern and unrelenting. Their policy of repression is well depicted in Nathaniel Hawthorne's "Scarlet Letter," and the plot of the novel rests upon an instance of its failure to keep in the straight path a shepherd of the people and one of his flock.

When the mythical deputy of the Duke of Vienna issued a proclamation, dooming all suburban houses of resort, the decree is made the subject of conversation between a clown (whom Shakspeare usually puts forward as a wise man in disguise) and a noted procuress, in this wise:

Bawd.—"Why here's a change indeed in the commonwealth! what shall become of me?

Clown.—Come; fear not you: good counsellors lack no clients: though you change your place you need not change your trade; I'll be your tap-

* History of Prostitution, pp. 95, 96.

* Sanger on Prostitution, p. 197.

ster still. Courage, there will be pity taken on you: you that worn your eyes almost out in the service, you will be considered."†

And this has been the result of all attempts to eradicate an innate social evil. So long as present conditions obtain among members of human communities, just as long will they give rise to their present results. Driven from the "suburbs," the harlot will ply her trade in the city, and if, after infinite pains, she be banished altogether, we resurrect the twin demons of seduction and adultery to fill her place.

(3) In the event of prohibition failing to accomplish its object, what measures are most likely to limit the evil of prostitution, and to curtail the misery and disease it engenders?

Before attempting to furnish a direct answer to this important question it is necessary to deal with the arguments of those who condemn all regulative measures. The *laisser-faire* idea has a great many advocates, and in reference to them some terse sentences from Dr. Beardsley's article will not be out of place:—"The importation of cholera is intercepted, variola aborted, yellow fever vigilantly patrolled, pestilence of any form no longer stalks among us without being hotly chased, but a disease which lacks not a whit the type of a plague, and which, upas-like, infects nation after nation, contributing generously to their charnel-houses, nestles among us and travels on friction wheels. Hundreds are honest, ardent in their researches after some antidote to this virus, but never essay to stop or modify the evil. Prophylaxis against venereal suffering sounds to these but balderdash. To quarantine a syphilitic is passing strange. The experiment is ridiculed as if the evil was self-limited, or repudiated as contending against a dispensation from heaven, to meddle with which was to befriend a crime. The stench of this leprosy already fills our nostrils, but no mettle is sounded in our legislators to face the railings of those who hate truth, and are timid at at every revolution. To qualify a wrong is not to endorse it. The health and longevity of the race are paramount to the defence of ethics or rude platitudes in morals. If life is jeopardized, sacrifices are imperative. Individual prejudices, dogmas however dear, the faith of ages, all most unloose their hold when the perpetuation of a perfect species is called in question. If the arm of the law is powerless to stay the gratification of our passions, if the admonitions and misfortunes of others do not dissuade us from the same snare, if the whore will ply her vocation, is it criminal to disarm her of her sting? Is it not conniving at the practice to suffer that foul doxy to parade her goods and pollute a neighborhood? The time is nigh when this vapid sentimentalism in religion—this morality which dubs every dissenter from creeds an anti-Christ, and translates the license of prostitution as free love, should be undone. The social evil cannot be remedied without some compromise. It is a monster too huge to be smothered, and we must curry favor with it to lessen its depredations."*

Mr. Solly, whose reputation as a surgeon is not confined to his native country, at a meeting of the Royal Medico-Chirurgical Society some years ago, gave utterance to sentiments that, more than any other, have inspired the vehement opposition encountered by reformers in their efforts to meet this evil by legislation. Said he:—"Far from considering syphilis an evil I regard it, on the contrary, as a blessing, and believe that it was inflicted by the Almighty to act as a restraint upon the indulgence of evil passions. Could the disease be exterminated, as I hope it cannot, fornication would ride rampant through the land." It is quite within the limits of truth to say that this doctrine is responsible for the barbarous refusal to admit syphilitic patients into the public hospitals of London, not a great while ago, and prevented the erection of special hospitals for a still longer period. It is this same enunciation of the Creator's "intentions" that condemned the use of anæsthetics in midwifery, and like interpretations of God's "will" carried to their legitimate conclusions, have obstructed many a needed reform in social customs.

At one period in its history the Royal Free Hospital magnanimously devoted the whole of 26 (!) beds to diseased prostitutes, but, says the report, "the venereal wards have been for some time untenanted, owing to loss of funds occasioned by the outcry raised against this hospital in one of the medical journals." This issue is now almost a dead one, but, it might be asked, if we follow out Mr. Solly's argument, is not pneumonia a disease inflicted by the Deity upon the indulgence

† "Measure for Measure," Act 1, Scene 2.

* "Chartered Brothels," *New Orleans Med. and Surg Journal* for Sept., 1880.

in thin slippers and low-necked dresses? Are not typhoid fever and diphtheria penalties imposed by God on civic uncleanness? Are we justified then, in view of the fact that it is hardly possible to do away with their causes, in trying to cure these serious troubles? Rejecting the theory that syphilis was imported from the newly-discovered American continent by Columbus, we may suppose it first showed itself in Europe about the beginning of the fifteenth century. How, then, did the Lord punish licentious Europeans before that time? What penalty paid the worshippers at the shrine of Venus Mucheia, or of that beastly old god Priapus? If Mr. Solly's followers declare their intention of going into mourning were a drug discovered capable of ensuring illicit intercourse without the dread consequences of syphilis, surely their grief would find some solace in the knowledge that it would no longer be possible to hand that awful disease down to the third and fourth generation; that innocent children could no longer be made to suffer for the wrong of a diseased father or mother.

Another fallacy contained in this so-called argument is that the fear of acquiring venereal disease acts as a check upon the wrongful indulgence in the amatory passion. That this is a grave error the experience of most physicians will prove. The man who commits any offence against his physical or moral nature is either careless of the consequences, or he hopes to be one of the fortunate few who escape contamination.

But in discussing this matter are we not introducing into a question purely scientific an element essentially religious? What has Hygiene to do with "a monstrous outrage on religion"? How does this "rupture of moral law" affect Sanitary Science? Theological dogmas and problems in science may run in parallel lines, but any attempt to make them intersect should be cried down. Without dismissing the subject, as some writers have done, with the assertion that in any conflict between Religion and Science the former must go to the wall, it might here be mentioned that a way out of the difficulty has been indicated by no less an authority than the Anglican Bishop of Carlisle. Writing in a late review his Lordship says: "It seems to me we want a new word to express the fact that all physical science, properly so-called, is compelled by its very nature to take no account of the being of God: as soon as it does this, it trenches upon theology, and ceases to be physical science. If I might coin a word, I should say that science is *atheous* and therefore could not be *atheistic;* that is to say, its investigations and reasonings are by agreement conversant simply with observed facts and conclusions drawn from them, and in this sense it is *atheous* or without recognition of God. And because it is so, it cannot trench upon *theism* or *theology*, and cannot be *atheistic*, or in the condition of denying the existence of God."*

The melancholy fact (following the foregoing line of thought) in Sanitary Science is that a widespread and terrible contagious disease is in our midst, and the conclusion we draw from a careful investigation of its nature is that it is possible by taking certain precautions, to prevent to a very considerable degree, the extension of the malady; consequently objections born of theological dogmas or religious creeds must not be allowed to have weight in determining either the amount, kind or extent of these prophylactic measures. Sanitary science, as such, is necessarily beyond the pale of religious faith, as such.

Living in a country where the policy of *laisser-faire* holds sway, one is forcibly reminded, in reading of the occasional descents by the police upon houses of ill-repute, of the story told of an old gentleman who endeavored to ward off diphtheria from his household, by disinfecting the sewer that ran past his residence. Every morning before proceeding down town he gravely carried a piece of chlorinated lime to the street ventilator, and, holding his nose with the disengaged hand, dropped the germ-destroying morsel into the filthy waters beneath. This solemn duty performed, he felt himself and his family quite safe for the following twenty-four hours. No doubt a similar feeling animates the authorities when they make one of their periodical raids upon the inmates of brothels that are not subject to further regulation. With some slight and unimportant modifications Beardsley's description of the spasmodic repressive method in vogue within the limits of the city of New Orleans will apply to the action of the police in Montreal:—"There is no determined nor concentrated movement against brothels as against a nest of counterfeiters. Now and then a raid is made on some disorderly house after the neighbors have become exasperated, and de-

* "God and Nature," Nineteenth Century for March, 1880.

manded sternly an abatement of the nuisance. These descents are limited—four a month is about the average. In the interval the traffic flourishes and loses nothing by the interruption. As the time approaches for another sally, for they come with mathematical regularity, the proprietor with the girls, if cunning, prepares to vacate the premises only to return as soon as the official intruders have quit. If a few mopies are nabbed, one dollar and costs the next morning purchases a reprieve, and they at once steer straight for the same den to greet their comrades in arms. It is another commentary on our police system that these houses are not, after the arrest, shut up and the property confiscated. The business is tacitly recognized as contraband, else the storming of the place is not justifiable. The intent of the law seems gratified, however, if only the tenants are ousted. The building is not cleared, as it ought to be, of its appointments, and its character publicly arraigned—the owner is not fined nor imprisoned for his conniving at the business. No ordinance directs the rent to be forfeited—nor are bonds set to the landlord for the healthy use of the property thereafter. The machinery of the concern is not disabled, it is merely stopped for a few days." * The high-level purist does not believe in either digging up or pruning the social Upas tree; he would occasionally pick off, here and there, a few green leaves, or at most restrain a too flourishing branch. This policy of indifference has been tried again and again, and each time it has been found wanting. Indeed it is based on the assumption that we are powerless to deal with the social evil, and consequently it would be idle to attempt it.

Turning from those who deny the right of governments to interfere with prostitution because such interference involves its "recognition;" from those who are governed by ignorant apathy, and from those who would institute a vigorous crusade without quarter against all kinds of brothels and brothel-keepers, we are led to enquire what means, if any, are likely to restrain prostitution and limit its attendant diseases.

When we recollect that most European cities, Paris, Vienna, Madrid, Hamburg, Berlin, Brussels, etc., have instituted systems of regulating the inmates of *les maisons de dames*, and that for certain military and naval towns of Great Britain an Act was passed (The Contagious Diseases Act, 1866) with the same object, we have abundant legislation to choose from. The French laws (representing continental legislation) and the provisions of the Contagious Diseases Act may first be considered, their good and bad points referred to, and then an attempt will be made to show that, with some material modifications in the direction of allowing prostitutes greater freedom of action than is possible under the latter law, a Bill might be framed applicable to Canadian cities, or, at all personals, more consonant with Canadian ideas of liberty.

In Paris *le Bureau des Mœurs* has charge of all prostitutes within the city. This office employs a body of police which in 1870 comprised twenty-four inspectors and three superior officers. This service is altogether charged with searching for those connected with clandestine prostitution (*prostituées insoumises*). There is a sanitary department attached to the *bureau* which superintends the health of the women, and for this purpose employs ten superior and ten assistant surgeons, who examine all prostitutes subject to police surveillance. All women found diseased are at once sent to the St. Lazare Hospital, where they are detained until cured. They are then allowed to resume their occupation, subject to certain regulations. All courtesans over sixteen years of age are registered at the *Bureau des Mœurs*, and are divided into two classes; 1st. *filles des maisons*, who live in houses of ill-fame and are subject to weekly examination at their residences: 2nd, *filles a carte* or *isolées*, who occupy furnished houses by themselves, and are obliged to present themselves at the Dispensary for medical inspection every fifteen days. Each of the latter class carries a *carte* or "bill of health," dated and signed by the surgeon who examines her. On the back of the *carte* are printed certain regulations to which she is ordered to conform. These orders refer to her conduct in public, forbidding her to ply her trade in daytime or after 11 p.m. She must be simply dressed, walk quietly along, and she cannot approach within a radius of 25 yards any church, chapel, the Palais Royal, Jardin des Plantes, etc. It is needless to say that clandestine strumpets resort to all sorts of artifices to elude the police, and the registered prostitutes evade, by all means in their power, the regulations intended to control their conduct.

M. Parent-Duchatelet, speaking of the severity

* *New Orleans Med. and Surg. Journal* vol. viii, pp. 203, 204.

of the French laws against "those who abuse a girl not yet arrived at the age of discretion, and the severe punishment inflicted on those who promote this premature debauchery," shows how this severity makes it difficult to bring home the crimes to their perpetrators on account of the secresy employed, and hence he says "these young persons are the greatest destroyers of public morals and health.* That is to say, the law does not recognize prostitutes under sixteen, so they are all the more sought after.

It will at once be seen that French laws are too tyrannical, too costly and too elaborate to introduce into Canada. Here, as long as she behaves herself decently, a prostitute has as good a right to walk during daylight on the public streets, to go to church, to attend the theatre, and dine at hotels as any other woman, and nothing would justify her forcible removal from any of these places on mere *suspicion* of her being there for the purpose of plying her trade. Again to hunt up clandestine women involves an arbitrary search of private houses which public opinion would not tolerate. That there is something radically wrong in the system is proved by the acknowledged fact that out of the 30,000 loose women in Paris in 1870 only 4,000 were registered and subject to sanitary inspection, and this in spite of a strict application of the almost despotic powers possessed by the police. Notwithstanding this, hygienic measures have wonderfully reduced syphilis among the registered prostitutes, as may be seen by the following table,* in which is given the proportion of diseased to healthy women among both the registered class and the clandestines captured by the police.

Year.	Registered Prostitutes in brothels inside of the walls.	Ditto in the suburbs.	Ditto in private lodging	Unregistered prostitutes.
1845	1 in 142	1 in 59	1 in 261	1 in 6.40
1846	1 in 152	1 in 53	1 in 183	1 in 6.37
1847	1 in 154	1 in 52	1 in 351	1 in 6.46
1848	1 in 126	1 in 37	1 in 182	1 in 5.66
1849	1 in 128	1 in 44	1 in 201	1 in 5.76
1850	1 in 148	1 in 47	1 in 142	1 in 5.31
1851	1 in 199	1 in 60	1 in 180	1 in 5.47
1852	1 in 184	1 in 76	1 in 349	1 in 5.64
1853	1 in 183	1 in 123	1 in 402	1 in 5.12
1854	1 in 176	1 in 102	1 in 377	1 in 4.26

A similar proportionate reduction has likewise been effected in other continental cities, but, as will be seen by the above table, the dislike of forced imprisonment in St. Lazare has had the effect of making unregistered harlots hide their diseases more than ever, bringing about a frightful condition of things among that class. The proportion of syphilitic to healthy women increased from 1 in 6.40 in 1845 to 1 in 4.26 in 1854 and in 1866 it had risen to one in every four.

The Contagious Diseases Act in some points resembles the French laws. Of course it was limited to certain naval and military stations with their suburbs.

One feature of these enactments provides that all prostitutes shall be registered and regularly inspected, and that when information is made on oath that a woman is a common prostitute a justice may issue a notice to such woman, through the superintendent of police, to appear for surgical examination. Certified Lock hospitals are provided for her if she is discovered to be ill. It proposes a heavy penalty on any brothel-keeper who harbors a prostitute knowing her to be diseased. Health tickets are issued to prostitutes; they are punished for evasion of the inspection, and the hospitals are supported by fines and taxes on the business. These provisions, after much opposition were passed by Parliament, and many were in favor of extending them to the civil population.

Mr. Wm. Acton, in his exhaustive work,* writes that he considers it very desirable that the Diseases Act should be made general, and a very high authority, Dr. Parkes, says, "The Act at these large stations has done great good; but, as framed and administered, it is far too feebly drawn, and too partially carried out, to cope entirely with the evil. The prostitutes are not thoroughly under inspection; many are not inspected at all; neighboring towns send in prostitutes; hospital accommodation is insufficient;—it is clear that the evil is too great to be dealt with piecemeal; it is inevitable but that the Act must eventually be made compulsory over the whole country, and the entire system of prostitution dealt with carefully and completely once for all." †

The agitation for repeal of the Contagious Dis-

* De la prostitution dans la ville de Paris, 1857.

* American edition of Westminster Review, vol. xciii. 77.

† Manual of Practical Hygiene, page 503.

* Prostitution considered in its Moral, Social and Sanitary Aspects. Third Edition.

eases Act has brought out all sorts of objections to it, some of which appear quite valid and still more of them absurd. Dr. Birkbeck Nevins, of Liverpool, has written one of the few pamphlets against the Act that are worth perusal.‡ Besides the evidence collected by Dr. Nevins and others, the editor of the *Westminster Review* has bravely laid aside those feeling of false delicacy which had hitherto prevented the Press from arousing and instructing the people concerning the extent and malign influence of the social evil; and in a number of articles and reviews furnishes his readers with unanswerable arguments against the extension of the Act of 1866, and its amendments in 1869.

Without attempting to particularize the evidence furnished by these writers the chief points may be briefly indicated as follows: (1) Such acts legislate for man, but treat woman as if she were only an instrument to satisfy his evil passions, and they subject her to a moral degradation below that of ordinary prostitutes not subject to the enactments. (2) The law compels women to commit themselves absolutely to a life of infamy, whereas before they had it in their power to turn back and reform. There is always a class (in some places a large class) of females who are driven to adopt prostitution temporarily as a means of gaining a livelihood or to support others dependent upon them. These unfortunates, if they wisely keep their own counsel, may resume their ordinary position in society; but never if they are forced to register themselves and become public prostitutes. (3) The enforced examination by a public officer wipes out any sense of modesty or delicacy they may have retained, and confirms them in a life of prostitution. (4) The whole system places serious obstacles in the way of attempts to reform the erring ones. When in hospital they naturally regard any advice or instruction as a part of the compulsory programme. They are bound to listen to it, and for that reason derive little benefit from it. (6) It is impossible to carry out the provisions of the acts in large cities, when conveniences for clandestine prostitution are so many and so varied. (7) It is asserted that "in towns where registration and forced examination are introduced the effect upon the morals of the rising generation is exceedingly injurious."*

‡ Statements of the Grounds upon which the Contagious Diseases Acts are Opposed, 1875.

* Report of Royal Commission on Contagious Diseases Act.

How to avoid the evil effects of governmental regulation, and yet do something towards lessening the diseases arising from the social evil, is the question that must not be considered.

To begin with, the seduction by a man come to years of discretion of a girl under sixteen years of age with or without her consent, should be made a crime and severely punished. There may be some excuse urged for the satisfaction of the sexual passion when the female is of age and already a prostitute—it may be that "prostitution in man is an irregular indulgence in a natural impulse," as the Royal Commissioners have put it, but to take advantage of the ignorance and inexperience of a mere child is inexcusable, and the offender should be rigorously dealt with. Such a law would strike at the root of one of the most fruitful sources of subsequent prostitution.

Then "Homes" for the reception of women reclaimable by such an agency ought to be provided, and above all, *voluntary lock hospitals should be established*, where diseased females could be properly treated and cared for, and women should be encouraged to enter them without being *forced* to do so.

The absence of opportunities for adequate treatment has always been one of the reasons why unclean prostitutes persist in their career after becoming diseased. In hospitals of this kind the patient should be surrounded by all the moral, intellectual and sanitary influences that would tend to elevate her from her degraded position, and perhaps induce her to abandon her evil courses.

The wards should be graded, so as not to confine in the same room the hardened prostitute with the girl who is new in crime and comparatively redeemable. For other reasons this gradation is necessary. To quote Parent-Duchatelet [*op. cit.*]: "It is difficult to convey an idea of the contempt which, according to the class to which she belongs, each woman manifests for those of the other classes. Those woman who associate with men of wealth or of high position look only with disdain upon women as are only sought after by men of merely ordinary fortune. Woman of this class, again, contemn, in like manner, the unhappy creature who only appears in the rags of the most disgusting misery. This distinction which prostitutes establish among themselves is avowed by all, and is specially remarkable when circumstances cause them to meet each other at the same place; they

avoid each other; they do not sit down on the same seat; they form isolated groups, and do not mix together in conversation. It may be said generally that these classes do not intermingle; that is to say, the girls do not pass imperceptibly from one class to another, and successively from the highest to the lowest; they remain till the end in that class in which they began their career, or out of which they have been unable to go; and thus it is that very beautiful girls may be seen to begin and end their life of prostitution in the most infamous places. Each of these localities being frequented by a particular class of men, the woman there acquire a tone, habits and manners, the result of which is that the girl destined for the artisan, the laborer and the mason finds herself misplaced with the officer, and is devoid of the necessary attractions for the latter. The same is true with respect to the woman who has contracted the habit of living with the educated and elevated classes of society: she shrinks from associating with coarse, vulgar people, who themselves are unable to appreciate the qualities which distinguish her. This rule may be considered general. A girl who makes her *début* in one class would believe herself to be losing caste in leaving the class she occupies for one immediately below it. This is partly the reason why so many girls withdraw themselves from prostitution a short time after they have entered upon it."

As these hospitals are essentially charitable institutions there is no reason why the inmates should not pay a weekly sum proportionate to the kind of accommodation received and the patient's ability to pay. It is extremely important that the nurses and medical officers should be especially respectful, kind and gentle. On this point the philosophic Duchatelet is very decided. "Experience," he says, "has proved the utility, indeed the necessity, that the medical officers should observe great gentleness, both in their speech and procedure; prostitutes overwhelmed with humiliation, treated with the utmost disdain, and feeling acutely their abjection, know how to appreciate a method of treatment less rude, and feel grateful for the kindly feeling it indicates. * * * * * * This gentleness, far removed from familiarity, and which is not incompatible with the reserve, gravity, and dignity which indeed it is necessary to emphasize under the circumstances, enables the physicians to command the respect and deference which are due to them, and which the women are eager to render."

Such a hospital should be overlooked by a matron of tried skill, and she should have under her nurses upon whom the greatest reliance could be placed. These officials should have full charge of the sanitary and moral regulations of the institution.

The medical staff should have charge of the medical department; and should advise with a committee of management when required. From these remarks it will be seen that we contend for a hospital supported principally by public charity and certain fees (the source of which will be hereafter referred to), because anything like governmental regulations of the internal economy of such an institution should be avoided, if possible.

The charitable contributions of the community to aid in the support of these hospitals will be all the more readily forthcoming when it is understood that the cure of disease and the alleviation of suffering are their main objects, and not the rendering of fallen women fit to co-habit with male prostitutes. Carried out in a proper spirit, such refuges for diseased females would effect a vast amount of good.

The work of social and moral regeneration might be carried on with an effect impossible in lock hospitals under the regulations that obtain under the Contagious Diseases Act. Dr. Nevins gives the following significant extract from the Metropolitan Police Report of 1874:—"Women come from unprotected districts, and insist on signing the voluntary submission form, in order that their names may be placed on the register, and that by this means they may gain admission into hospital." * How much more readily would diseased unfortunates seek a shelter where they would meet with sympathy, where they would not be looked upon with disdain, and where they would be assisted to recover their lost place in society, than if they had to incur the degradation and penal consequences of registration.

But there is another side to the story, which justice and the public health demand should receive attention. A diseased prostitute, whatever else she may be, is a local centre of contagion and a dangerous member of society; and means should be taken to prevent her from spreading the disorder from which she suffers should she persist in doing so. When a woman has a venereal disease, and in that condition knowingly gives it to others, it behooves the authorities to step in and, if possible,

* Capt. Haris's Report, see sect. 10, par. 7.

prevent the infection. The same arguments that justify removal to civic hospitals of cases of small-pox and cholera apply to syphilis and gonorrhoea.

In the interests of the public health such cases should be isolated. It has been suggested that physicians should have power to communicate to the chief of police the names of those prostitutes from whom any of their patients has contracted disease. The medical man should satisfy himself that the patient is in a position to state positively when, where, and from whom, he caught the contagion, and that the female is in the habit of distributing her favors promiscuously or for money. Where there is any doubt about the last two points the suspected woman should have the benefit of it, but in the majority of instances the police would be able to settle the question satisfactorily. Having satisfied himself on these points the Chief should have power to serve a notice on the woman to forward to him, within 24 hours, a certificate from a regular practitioner of her being in a healthy state, or else, if she be a common prostitute to present herself at the hospital for treatment. In the case of those who are not "common" in the ordinary acceptation of the term, *i.e.*, who do not practice their trade openly, and do not live in brothels, it would be justifiable to accept a certificate from a regular practitioner that the woman is under treatment by him, and that he would use every means in his power to prevent her from co-habiting until she recovered. In this way(for all these proceedings would be kept secret, and neither the name of the male sufferer nor of the female patient would be divulged) scandal would be prevented in the case of occasional and otherwise "respectable" females.

For the other class, those who are generally recognised strumpets, neglect or refusal to furnish a proper certificate, or to undergo treatment of disease, would justify their arrest and forcible detention in special wards of the hospital for a time discretionary with the officials in charge. Action of this kind would encourage the voluntary system and leave coercion as a *dernier ressort*. It would incite women to apply for treatment at once, and not wait until they were compelled to quarantine themselves by the strong arm of the law. It would respect the respectable, but punish the guilty. Voluntary patients might be allowed to leave the hospital when they desired, but they should be warned that any attempt to return to their trade until fully cured would involve their semi-imprisonment in the "coercion" wards of the hospital, and cut them off from all the privileges of the voluntary side. Examinations should be made voluntary in a Dispensary attached to the hospital, and a small fee (in Hamburgh, where the regulation system is in vogue, it is only a mark) should be charged. As soon as the intention of periodical examinations was known they would begin to be appreciated and, in time, the great majority of the prostitutes in the city would be likely to present themselves for medical inspection. A larger fee might be charged for attending the prostitutes at their houses. Certificates of good health might be issued if asked for by the women, but it must be understood that they are not considered necessary. It would, of course, be out of the question to admit students to any part of the hospital except to the coercion wards. This portion of the institution, being in some sense a city house of correction, would have a good claim for civic support, and in that case might be overlooked by a local inspector. In the event of a hardened sinner persisting in spreading venereal diseases instead of applying to hospital for relief, and necessitating repeated arrests, it would be justifiable to have her registered and examined by the medical officer not less frequently than once a week. This would be a greater punishment to her, in view of the treatment of her other sisters in vice, than imprisonment.

To complete these suggested regulations it ought to be made possible for an inmate of a house of ill-fame to abandon her life of infamy free of any claim for board, liquors, clothes, etc., the brothel-keeper may have upon her. It is, of course, to the interest of procurers and keepers to exert as great an influence upon their stock-in-trade as possible, and for this purpose many of them try to keep the girls in debt, so that they are compelled to continue in their old ways. It would be a good idea, also, to subject brothel-keepers to a heavy fine, if it be proved that they allow any of their women to remain in their houses after becoming diseased. The proceeds of such fines would go to defray the expenses of the hospital. The advantages of the measures above specified recommend themselves, because: (1) the legislation involved is not a one-sided treatment of woman as if she were made for man simply to gratify his lust upon; (2) they leave a way open to those erring ones who desire to reform;

(3) women are not compelled, except as a last resort, to undergo a degrading periodical examination by public officers; (4) the system does not condemn to a life of hopeless infamy those who err temporarily, or who are seduced by designing men; (5) they provide for clandestine prostitution; (6) they are voluntary to a very great degree, and attempt to do by kindness what coercion has, over and over again, failed to accomplish; and, lastly, (7) they do not violate the sanctity of private houses, as the system of forced registration is sure to do.

An enumeration of the benefits to be derived from Magdalen hospitals would not be complete without a reference to that noble band of religious women belonging to the order of *les Sœurs de la Compassion* who have charged of *l'hôpital de Lourcine* in Paris. These devoted woman have caught the true significance of Christ's teaching when He stepped in between the woman taken in adultery and her accusers, the stern Scribes and Pharisees, and rebuked them for their self-righteousness:—

"Woman where are those thine accusers? Hath no man condemned thee? She said, No man, Lord. And Jesus said unto her, Neither do I condemn thee: go, and sin no more." * And these considerations bring us back to the old question, When shall we see prostitution itself abolished? and while the discouraging and too ready reply is, not while society exists in its present state, one is inclined to believe that a great deal of the difficulty arises from the unjust and despicable manner in which society treats women who lose their virtue from any cause. A man sins, and social custom either excuses or forgives the transgression. A woman goes astray, and every avenue of hope is at once closed against her. The escapades of the rake bear such social interpretations as "sowing his wild oats," "young men will be young men," and so on; but upon the temple of the harlot's shame, as over the portals of Dante's *Inferno* is carved the dead anaglyph:—"All ye abandon hope who enter here." If society expects to abolish prostitution it must first insist upon meting out the same measure of condemnation to both sexes for offences committed by either.

October 20, 1885.

*John viii. 10, 11.

Progress of Science.

ON TYPHOID FEVER, ESPECIALLY WITH REFERENCE TO PROGNOSIS.

Delivered at the Hospital of the University of Pennsylvania.

By William Pepper, M.D., LL.D.,

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Gentlemen,—The patient before you to-day was admitted to the hospital seven days ago. We could obtain no definite history, but, as far as could be learned, the man had been sick for two weeks before admission, with delirium, continuous fever, hemorrhage from the bowels, and, for a day or two before he came in, with cough and rapid respirations. From this account it is probable that he was admitted at the beginning of the third week of an attack of typhoid fever complicated with pneumonia. The course of the case during the past week is indicated by the following notes:

January 3 (day of admission). There were no evidences of blood in the discharges from the bowel. The face was flushed, the tongue was dry and coated, and there were sordes on the teeth.

Jan. 4. Had some delirium; belly moderately distended; several spots of typhoid-fever eruption were detected. There were several liquid stools, dark yellow in color. Shortly after admission the temperature was 103.4°. After this the temperature fell and continued to diminish until two days ago.

January 6. More delirious, plucking at the bedclothes. Temperature not so high. Dulness over the right lower lobe of the lung posteriorly, and over the dull region the characteristic crepitant râles are heard. There is retention of urine, it being necessary to use the catheter. Temperature between 101°. and 102°.

January 7. Still further fall of temperature. The dulness over the posterior portion of the chest is extending upward, having now reached the third rib. The restlessness, delirium, and plucking at the bedclothing have continued.

These symptoms continued through the 8th, but during the night of the 8th the temperature began to rise, and yesterday morning (the 9th) it stood at 101°. Last night it was 102.5,° and it is the same this morning, so that there has evidently been a renewal of the fever.

The treatment has been one of active stimulation. He has taken as much milk as we could get him to use, giving it in comparatively small quantities, repeated every hour or hour and a half with a small quantity of whiskey, so that he has averaged one ounce of whiskey every two hours since admission. In addition he has taken turpentine. I would mention that, since admission, the bowels have been open only once each day, with the exception of one day during which there were four stools, and again, three days ago, when twenty-

four hours passed without any stool. He has borne the turpentine mixture very well. For the excessive restlessness which he has presented he was last night given nine grains of musk.

We find our patient, then, this morning, at the beginning of the fourth week of the attack, delirious, with from time to time rolling of the head, with very little intelligence, with the mouth partly open and the teeth and lips coated with dry sordes. These sordes are nothing but the foul secretions of the mouth dried by the passage of the air over them. When a patient with typhoid fever has no obstruction of the nostrils, and retains sufficient intelligence to breathe through them, and keeps this up during sleep, sordes do not form so much ; but when the patient sinks into a typhoid state, with dulness of mind, breathing is carried on through the mouth, and the secretions are rapidly dried and form crusts. This is largely owing to the fact that, as a result of the high temperature and the perverted state of the secretions, all the buccal secretions are thick and viscid, and readily dry, with the formation of crusts.

When told to protrude the tongue, he does so better than he did a few days ago. It is coated with a grayish-brown fur. As I have already stated, the temperature this morning is 102.5°. The pulse is very small, compressible, and 140 per minute. The temperature is well kept up ; the hands and feet are warm. For the last day or two the distention of the abdomen has been very great, and in order to remove this tympanitic condition, turpentine stupes have been used every couple of hours during the night, and this morning the distention is somewhat reduced.

I shall not disturb him to demonstrate the sign of pneumonia. The dulness, however, does not extend anteriorly, and over the front of both lungs auscultation reveals the presence of vesicular murmur mixed with coarse râles, chiefly bronchial, showing that there is considerable bronchial irritation of both lungs, with consolidation of the posterior portion of the right lung.

This case illustrates the difficulties attending the treatment of typhoid fever in hospital practice. This man, having received no medical care, no proper nursing, and improperly fed, was admitted to the hospital at the end of the second week, by which time his vital powers had been exhausted and his digestion totally broken down, with diarrhœa of from four to six loose stools daily, which had been allowed to continue ; and, worse than all, with a pneumonia which very likely developed on account of his want of treatment. The late period at which he comes under treatment, the gravity of the nervous and abdominal symptoms, and the grave complication of pneumonia which he presents, make the prognosis unfavorable, and I expect this man to die. At the same time, the decrease in temperature which has taken place during the past four or five days until night before last, the subsidence of the diarrhœa, and the absence of vomiting, are favorable symptoms, and hold out a hope of his pulling through. The great danger is that the weakness of the heart, which has resulted from want of proper care and proper sustenance, is such that it will be unable to stand the strain, and that we shall have symptoms of heart-failure, increasing pulmonary engorgement, disturbed capillary circulation, deepening stupor, and death. Forty-eight hours will settle the question.

The complications of typhoid fever may be divided into the nervous, the abdominal, and the pulmonary. It is curious how different cases will present these complications in different degrees of severity. Scarcely ever will they be found equally well marked. As a rule, when the nervous symptoms are marked the abdominal are not. The combination of marked nervous and pulmonary symptoms is more common. In some of the worst cases of the abdominal complications of typhoid fever, such as copious and intractable diarrhœa, hemorrhage, and great distention of the abdomen, the brain is perfectly clear. In the present case the abdominal symptoms seem to have been marked in the early stage. The man had more or less diarrhœa ; but this may have been due to want of proper care, for as soon as he came under proper treatment the diarrhœa ceased, and now he has but one stool a day. We estimate the gravity of an attack of typhoid fever, in the first place, by the range of temperature. If the temperature is not above 104° it is not an unfavorable sign. If it reaches 105° but does not remain at that point, it is not serious. Anything above 105° we term hyperpyrexia, and this is a dangerous sign, particularly if the temperature remain almost continuously, day and night, above 105°. When, however, as in the present case, the temperature ranges between 101° and 104°, and does not exceed this latter point, it does not become a source of much added danger. In children and in sensitive women a temperature of 105° is often reached and maintained for some time without serious danger. It is important to recognise this fact, for it will save the necessity of resorting to powerful measures to reduce the temperature. Far too much importance—or, rather, far too exclusive importance—is now a days attached to the study of the temperature in febrile diseases. It is important, and should be carefully watched, for it aids both in prognosis and in treatment ; but the ease with which thermometric observations are made, their accuracy as contrasted with the manner in which many other symptoms have to be studied, and the certainty which they seem to give in studying the course of the case, are apt to divert our attention to too high a degree from the study of the pulse, the nervous system, and the digestive organs ; whereas, as a matter of fact, the temperature in many cases is less important than information drawn from the other points to which I have referred. Particularly I am sure that we allow our treatment to be governed too exclusively by this question of temperature, and are too prone to resort to powerful antipyretics, which sometimes are depressing, irritating, and disturbing. Many cases

of typhoid fever do perfectly well without severe antipyretic treatment, even though the temperature be high. It is only when the nervous symptoms and the condition of the heart indicate that the high temperature, in the absence of other complications which would account for the symptoms, is acting as a disturbing element on the brain and the heart that it calls for active treatment. Then we should resort to any plan of antipyretic treatment which is efficient, as large doses of quinine or the external use of water. So long as the high temperature is maintained without manifest injury being inflicted on the brain or the heart, it is better to avoid powerful antipyretic measures and to allow the case to run its normal course. This is particularly applicable where there are complications which are of themselves sufficient to maintain the high temperature and account for a certain amount of nervous irritation. Under such circumstances these powerful remedies often do more harm than good.

Among the indications to be considered in the prognosis I have mentioned the heart and the pulse. This is exceedingly important. I think that the study of the sounds of the heart—of the strength of the muscular or first sounds of the heart, the strength of the impulse, the way in which the artery fills at the wrist, how it resists pressure, the quality of the beat, the frequency of it, and its regularity—is of the first importance in the prognosis of typhoid fever and as a guide to treatment, particularly in regard to the important question of the administration of stimulants. You have a patient with a dry, brown tongue and marked nervous symptoms. It may be difficult to decide whether he needs remedies of a sedative character, and perhaps counter-irritation, to quiet the nervous restlessness and draw the excitability from the nerve-centres, or whether he requires stimulation to raise the tone of the circulation and cause a healthier tone of action in the nerve-centres, and thus bring about a secondary quieting or sedative effect. The best test of this is the action of the pulse and the influence of stimulants on the pulse. In a case where the pulse is from 120 to 140 per minute, very compressible, so that it collapses under the slightest pressure, with an exceedingly weak first sound, so that it assumes almost a valvular character, stimulants may be given freely; and, under their use, as a rule, the temperature will fall, dryness of the mouth will lessen, and the nervous symptoms will improve. These results indicate that the stimulants are doing good, and encourage us to continue or to increase them.

This man needs free stimulation, and if he can stand one ounce of whiskey every hour we will not hesitate to give it to him through the next two or three days, to tide him over this crisis, for unless the heart is kept up I fear that he will die in the way which I have mentioned.

Symptoms referable to the abdominal organs afford some help in prognosis, but they are not as reliable as the evidence presented by the temperature and the circulation. The amount of diarrhœa which the man has had has not been very serious, but yet I think that diarrhœa in typhoid fever is not a good thing. I do not regard it as an evidence of the efforts of nature to eliminate the poison from the system. On the contrary, it is to me an evidence of active disease in the intestinal canal, of imperfect digestion of the food taken, of the presence in the intestines of putrid, irritating secretions. It is undoubtedly better that such irritating secretions should be discharged than that they should be locked up in the bowel to undergo putrefaction and probably furnish fresh poison to be absorbed. If, however, by regulated diet, by the avoidance of irritating remedies from the earliest moment that typhoid fever is suspected, and by the use of remedies suitable for the disease of the glands which is certainly going to develop, we can render the matters which enter the intestine so easily digestible and assimilable that they will not putrefy, we may keep the secretions in a less putrid state, and thus diminish the diarrhœa. I think that the early treatment of a case of typhoid fever has more to do with the state of the bowel than anything else. It frequently happens that when a patient presents himself to a physician in the early stage of typhoid fever he is given a laxative, with the idea that he is suffering from a slight catarrhal attack from irritating matter. As you know, one of the diagnostic signs in the early stage of typhoid fever is the remarkable effect from a laxative. It will produce several loose stools; and when the physician sees this his attention is directed to the possibility of the case being one of typhoid fever. But I do not know that much is gained by this therapeutic test. Suppose the case were only one of catarrh of the intestine, allowing the bowels to remain quiet would prolong the case only twelve or twenty-four hours, the irritating matters would be discharged, and the patient would have taken nothing to increase the trouble; but if the case is going to be one of typhoid fever, the patient has on the brink of ulceration a number of glands throughout the intestinal canal, and then I think that even the mildest laxative is undesirable and may be directly harmful. I have no doubt that many cases of typhoid fever have this intestinal element, and are made serious by injudicious management during the first forty-eight hours. What is wanted is absolute rest, absolute diet, and absolute avoidance of direct medication until the disease indicates what it probably is going to be. When diarrhœa is present, it is to be checked, not by the use of opiates to lock up the bowel, but by reducing the food taken until we obtain that which can be absorbed. The ordinary principles of alimentation are as true in typhoid fever as they are in health. It is not that which is put in the stomach that does good, but it is that which the stomach is able to absorb and appropriate and put in such a condition that when it enters the intestinal canal it shall be readily absorbed. It is useless to pour three ounces

of milk one hour and three ounces of beef-tea the next hour into a patient who is not really absorbing more than half an ounce in the twenty-four hours. The more food is given under these circumstances, the more is digestion deranged. Fermentation takes place, and the abdomen is greatly distended from the accumulation of gas. I should try to check the diarrhœa by reducing the diet to a point where the patient is able to assimilate it, by the use of remedies directed to heal the irritated mucous membrane, and by the use of opiates only in small quantities. Opiates to check the diarrhœa of typhoid fever usually do as much if not more harm than good. A continuance of diarrhœa is often well borne, particularly if the stools come from the lower bowel as a result of the discharge from the ulcers, and do not come from want of absorption of the nourishment which is taken. If they are not associated with great tympanitic distention of the belly, or with marked failure of the pulse, or with severe nervous symptoms, a certain number of loose stools may be borne without particular harm. When, however, there is continued diarrhœa, with frequent copious stools, particularly if discharged unconsciously, with distention of the abdomen, showing that the intestinal muscles and the muscles of the abdominal walls are paralyzed, the prognosis is extremely bad, for such diarrhœa is apt to prove uncontrollable.

Another symptom referable to the abdominal condition of the intestines is hemorrhage. Hemorrhage from the bowel often occurs as a hemorrhoidal discharge and means nothing serious. Slight hemorrhages occurring early are not of evil omen, and hemorrhages occurring at the time that the sloughs are cast off may not be serious; but where the bleeding is frequently repeated and the amount lost is large, and where it is associated with diarrhœa and great tympanitic distention of the abdomen, it indicates such prostration of vitality and such dyscrasia of the blood as to render the prognosis very unfavorable.

The tympanites which this man has had amounted to a serious trouble; and sometimes the tympanitic distention goes so far as to constitute an important element in the prognosis. It indicates, in the first place, a paralytic state of the muscles of the abdominal walls; and in the second place it indicates fermentation of the ingesta and deficient digestion and absorption. This distention, by its pressure upward, causes marked interference with respiration and adds greatly to the effects of any pulmonary trouble which may coexist. Distention of the abdomen in typhoid fever should be studied in this way so as to be traced to its proper cause. If it is the result of muscular debility, it will be helped by stimulating applications. Strychnia is particularly useful in these cases. If it is the result of fermentation of the ingesta, it may often be diminished by peptonizing the food and by the internal use of carbolic acid and creasote, which will lessen fermentation. Where the accumulation of gases interferes with the action of the diaphragm, an attempt should be made to draw off the gases by a rectal tube. This operation usually has to be repeated, and I have even been forced to puncture the abdominal wall with a hypodermic needle to draw the gases from the intestine; and I have seen patients recover where I have had to do this on several successive days on account of interference with respiration. As a rule, however, when it comes to this point death follows.

I shall add to the large amount of alcohol which this man is taking one-fortieth of a grain of strychnia four times a day. This will be dissolved in weak alcohol and water and thrown under the skin of the abdomen.

The pulmonary symptoms of typhoid fever afford very important elements in prognosis. We should never let a day pass without examining the lungs and heart of our typhoid-fever patients. A certain amount of bronchial irritation is an almost constant element in typhoid fever. Usually by the end of the second or during the third week we find hypostatic congestion, with a little impairment of resonance, weak vesicular murmur, and crepitant râles on inspiration over the lower lobes behind. This we consider an almost inevitable feature of the disease; but when, instead of merely a hypostatic congestion, the disease, as here, goes on to consolidation, and, as you observe, is unilateral, not symmetrical as is hypostatic congestion,—not limited to the lower lobes, but involving first the lower lobe and then extending to the upper lobe, with bronchial respiration and with coarse, crackling rales,—we know that it is not merely an exaggerated degree of that congestion incident to the disease, but that it is a real complication, a croupous pneumonia.

As I have said on another occasion, the typhoid state and pneumonia present different relations to each other. Pneumonia may be present and run into the typhoid state. This really is typhoid pneumonia. Again, there may be typhoid fever and pneumonia occurring as a complication; but this has nothing to do with typhoid pneumonia. It is typhoid fever. The pneumonia is a purely intercurrent, accidental phenomenon, a true complication,—and it is a complication of great gravity. Sometimes it takes the form of catarrhal pneumonia; and this is even worse than croupous pneumonia. It is apt to be associated with extensive collapse of the lung. The areas affected multiply and spread, and exudation and softening occur: so that, on the whole, catarrhal pneumonia complicating typhoid fever is even more unfavorable than croupous pneumonia, except the extent of the latter be very great; but either of them is a grave complication and adds largely to the mortality. If it comes upon a patient with bad typhoid fever, already reduced by other symptoms, as diarrhœa, and who presents evidences of nervous exhaustion and failure of cardiac power, the chances are that the patient will die. The prog-

nosis is rendered graver by the existence of the serious pulmonary complication, and this is an indication for vigorous stimulation. The amount of alcohol should be increased, as much concentrated nourishment as the digestive organs will stand should be given, and carbonate of ammonia and turpentine administered internally. In this case turpentine in the dose of ten drops in emulsion every three hours has been given for the tympanitic distention of the abdomen, and has been found to act satisfactorily. It will therefore be continued.

Lastly, this case is instructive in regard to the nervous symptoms, which are always valuable in prognosis and treatment. We expect a certain amount of nervous disturbance in these cases, and rarely is it wanting. Occasionally it is absent, and this year particularly I have seen an unusually large number of cases of typhoid fever which were characteristic in other respects, but presented no nervous symptoms whatever. Another curious fact is that in many cases during the past year the abdominal symptoms were wanting, and many cases presented constipation, so that it was necessary to use an enema every third or fourth day. In some cases I gave once a week a grain of calomel in one-tenth of a grain doses, followed by an enema. As a rule, however, we expect some nervous disturbance. As long as it is only a little night delirium it is not an evidence of much danger. This is, of course, more marked in those of a nervous temperament. When it deepens into marked hebetude with tendency to stupor, or, still more, when it takes the form of constant, restless delirium, with quick suspicious glances of the eye alternating with dulness, with constant twitching even when the patient seems to be asleep, with plucking at the bedclothes, it is a symptom of gravity. Other grave nervous symptoms are struggling constantly to rise and slipping down in the bed as from muscular debility. I need not say that profound stupor and convulsions are very serious symptoms. This man has presented twitching of the tendons, picking at the bedclothes, and almost constant delirium in a marked degree ever since he had been under observation. As a rule, the nervous symptoms of typhoid fever are evidences of debility and call for a stimulating plan of treatment. When in the early stage of the disease they are present, with marked arterial excitement, flushing of the face and injection of the eye, they are indications for counter-irritation and a sedative plan of treatment. In the present case the nervous symptoms have been such as to call for stimulation, and as he has been stimulated the nervous symptoms have diminished. Here, then, is an important guide for treatment. If, under the use of stimulants, the nervous symptoms diminish and sleep becomes more natural, we know that the stimulants are doing good.

This patient is bearing stimulation very well. The only question is whether or not we can stimulate him enough to tide him over the next twenty-four hours. He will be given eighteen to twenty-four ounces of whiskey in the twenty-four hours, ten drops of turpentine every three hours, and one-fortieth of a grain of strychnia hypodermically four times a day, and if he is restless at night the musk shall be repeated.

[This case was again presented to the class two weeks later. An abscess of the parotid had formed and opened, but the patient was greatly improved, and had been free from fever for several days. At this time the quantity of stimulus, which had been reduced, was still further reduced, so that he received half an ounce every two hours. He was also ordered a mixture containing one-fortieth of a grain of strychnia, two grains of quinia, five drops of dilute hydrochloric acid, ten minims of compound tincture of cardamom, and sufficient water to make one drachm. This was to be taken four times a day, and constituted the only treatment. The patient made a rapid recovery. REP.]

DISORDERS OF DIGESTION.

From the *London Med. Times*, February 7, 1885, we note the following extract from Dr. T. Lauder Brunton's lecture:

In the first lecture, the lecturer had stated that the function of digestion, like health generally, might be strong or weak. A strong digestion was capable of withstanding all sorts of adverse influences, while a weak digestion remained undisturbed only under the most favorable circumstances. When any disturbances occurred in the digestive function, no matter whether it were strong or weak originally, the first step towards restoring it to health was to remove, if possible, any disturbing causes which might still be acting upon it. One of the commonest of these was imperfect mastication. This frequently arose from too short a time being allotted for a meal, or, from the mind being occupied during the meal with the idea of something to be done afterwards. Persons who took their meals alone very frequently read during them. But a solitary meal should be avoided if possible, for the mere presence of a companion, and, still more, occasional conversation, acted as a pleasant stimulus, and tended to maintain the nervous activity referred to in the first lecture as an important factor in perfect digestion.

Another cause of imperfect mastication was the condition of the teeth. Sometimes the teeth and gums were tender, or one or more teeth might be decayed, and the discomfort or pain occasioned in them by mastication led people to bolt their food, or to masticate on the other side of the mouth, if the tenderness was limited to one side. When all the teeth were gone, the person might chew perfectly well, not only by means of artificial teeth, but also without them. The effect of thorough mastication upon the food would vary a good deal according to the nature of the food itself; and tough substances, which could with difficulty be comminuted,

would be more indigestible than those which were readily broken up.

The fine subdivision of fatty food was of great importance in regard to its digestion. The more minutely the fat was subdivided, the more easily was it digested.

In regard to butcher's meat, also, there were great differences, depending both on the kind of meat used and its condition at the time of cooking; meat which was cooked before *rigor mortis* appeared, or after it had passed off, was tender; but meat cooked while *rigor mortis* still existed was sure to be tough. In the case of game, the practice of keeping the meat until it was actually commencing to decompose, was not without some danger; for not only might the products of decomposition formed in the meat, before it was cooked, be injurious but decomposition would be rather apt to occur more readily in the intestinal canal. The gastric juice, no doubt, had a considerable antiseptic power, and so had the bile; but these powers might be overtaxed, and eating high meat was one of the ways in which this might be done. It was, however, rather extraordinary to what an extent the consumption of decomposing food could be carried without any immediate injury, as was seen among the Esquimaux and Icelanders.

After referring to the importance of good cooking, and observing how unappetizing badly-cooked food was, the lecturer spoke of intemperance. The proper way to abolish drunkenness, he said, was to remove the thirst that led to it. The malnutrition which gave rise to a craving for alcohol might be a consequence of imperfect digestion, as well as of an insufficient supply of food.

But, besides cooking and mastication, a most important question had to be considered, viz., the kinds of food a person might eat. In a healthy man the best guide, both as to quantity and quality, was the appetite. Food eaten with a relish was, as a rule, wholesome. Too great a regulation of the diet was sometimes very injurious. But the palate and appetite alone would not serve as reliable guides to the quantity and quality of food. They had to be regulated by experience.

Dyspeptics might be regarded as a peculiar class of people, requiring fuller instructions as to diet than healthy people; and a few general directions, to them were by no means out of place. Thus, they might be directed to avoid new bread, buttered toast, muffins and pastry, all of which were difficult to disintegrate. They might be told to eat fish, or to prefer meat which had a short fibre, like mutton, chicken, or game, rather than take those meats where the fibres were long and tough, like beef.

There were some substances taken with food, which were utterly indigestible. Most seeds, when whole, were indigestible. Even when broken, like the kernels of nuts or almonds, they were sparingly digestible; and the same was the case with the skins of fruits, and the harder fibres and stalks of vegetables. Where the intestines were slow to act, such things as strawberries, raspberries, figs, nuts, prunes, and apples, might be allowed and even recommended; but where the intestines were irritable, all such things must be forbidden. Acid fruits were not only indigestible in themselves, but were apt to leave irritation behind. Some drinks were peculiarly liable to cause indigestion; for instance, sour wines, some kinds of beer, and tea.

Tea was better borne by the stomach, when taken with bacon or tongue, *i.e.*, with cured meat than with fresh meat, and it was partly owing to that fact that many people could drink tea at breakfast who could not take it at any other meal. When taken two or three hours after lunch, tea brought on acidity, probably because the contents of the stomach were much more acid at that time than at any other.

Amongst the poor the tea was so made as to contain a large proportion of tannin, which had an irritating effect; then, again, it was taken very hot, heat was a stimulant to the heart, but in this case, the heat would reach the heart directly through the thin diaphragm. Coffee had not such an irritating effect as tea, and cocoa was still less irritating.

Another cause of imperfect digestion was fatigue. "How often," said the lecturer, "do we find that the meal taken by a person immediately after a long railway journey disagrees with him, and either causes sickness, diarrhœa, or a bilious headache. Forty winks after dinner is by no means a bad thing, but forty winks before dinner is frequently much better." Effects, somewhat similar to those of fatigue, might be produced by depressing or disturbing mental emotions or bodily conditions. Different emotions appear to affect specially, not only different organs, like the heart and intestinal canal but different parts of the digestive apparatus. Thus disgust affected the stomach, causing vomiting; fear was seen, in some of the lower animals, to affect the rectum, causing defecation; compassion affected the small intestine producing borborygmi; worry and anxiety, although they worked upon the stomach and lessened appetite, appeared to have a very special influence upon the liver.

They sometimes produced jaundice, and not unfrequently caused glycosuria; indeed, most of the cases of diabetes in middle-aged persons appeared to originate in worry and anxiety.

In treating cases of indigestion, or the consequence due to injurious mental influences, the depressing cause must be removed, if possible. If this could not be done, change of air and scene, with exercise short of fatigue, and in the open air, were serviceable. Bromide of potassium, either alone or combined with bromide of ammonium, was very useful, both in lessening the sensibility of the nervous system to worry, and in procuring sleep.

Gastric tonics increased the appetite, loosened flatulence, and tended to diminish the discomfort and languor which were apt to accompany indigestion. Another class of remedies was that of carminatives, which tended to disperse flatulence.

Amongst the most powerful of these were ethers and volatile oils of various kinds, charcoal and subnitrate of bismuth, which, however, produced their effects in a totally different manner. Closely allied to carminatives, he placed stimulants, including alcohols and ethers. He was not opposed to the use of alcohol, provided always that it was used in moderation; the infirm and aged required a little wine.

Treatment might also proceed on other lines; the products of waste had to be removed; purgatives were used with this object. A regular action of the bowels was important, not only by removing the indigestible residue of food, and thus preventing fecal accumulation, but by getting rid of some injurious products which had been formed during the process of digestion. Where the bowels were habitually constipated, a most useful thing was to give a small aloetic pill before the last food of the day, dinner or supper as the case might be. The use of such pills might be continued for very many years together, without the least impairment to the general health. The saline natural waters, or the salts obtained from them, were best given the first thing in the morning, and should be either warmed or given along with warm water.

There were two kinds of biliousness, *i. e.*, biliousness with two different conditions of biliary flow.

In the one kind, the stools were clay-colored, from the absence of bile; in the other, the stools were either normal or dark-colored, from excess of bile. Certain bodies belonging to the aromatic series had a very remarkable action upon the secretion of bile—some rendering it much more watery than before; others, again, making it so thick and viscid that it would no longer flow through the biliary capillaries, whence jaundice resulted. A blue pill and black draught always proved useful in such conditions.

Closely connected with cholagogues and hepatic stimulants, there was another important class of drugs, namely, alteratives. Nitrohydrochloric acid was a favorite remedy, and a very useful one in biliousness, and chloride of ammonium was much recommended. Another class of remedies was also useful in indigestion, viz., diuretics. By the frequent use of water as a diluent, either alone or with salines, the consequences of indigestion, in regard to the lungs, heart, and head, might be often averted or remedied.

One of the most important methods of treatment consisted essentially in passive exercise and abundant feeding. Treatment by massage increased the nutrition, both of the voluntary muscles and of the internal organs; and under its use patients, apparently hopelessly incurable completely recovered.

The lecturer concluded with a brief reference to a case in which this treatment had proved eminently successful.

THERAPEUTIC NOTES.

Taken from Lectures in N. Y. Polyclinic, by E. L. FRIDENBERG, M. D., Peoria, Ill.

VARICOSE VEINS.

Fluid extract hamamelis (Bullard & Crenshaw's) in teaspoonful doses three times a day. This treatment should be kept up for at least four months, and will give relief in every case, and in a majority of cases will effect a cure.

ERYSIPELAS.

Wash the parts with buttermilk every three hours, and give internally tincture of iron and quinine.

GONORRHÆA.

Take sol. corrosive sublimate, 1-500 (holding tight the urethra so as not to allow solution to enter the bladder) and inject two or three times, then wash out excess with pure water, and then give Vichy salts. Generally one sitting will perfect a cure. In the more chronic form of gonorrhœa use the following:

R Liq. plumbi subacet dil. 7 ozs.
Zinci acetatis: 5 grs
M. fl. sol.
Sig. Inject three times a day

CONDYLOMATA ON TONGUE IN SYPHILIS.

Treat the same with the following:

R Corros. sublimate. 15 grs.
Ether, 2 ozs.
M. fi. sol.
Sig. The physician himself should apply this.

STONE IN THE BLADDER.

R Acid benzoici, ½ to 1 br.
Soda bicarb, 1 to 3 dr.
Aquæ, 5 ozs.
Sig. Teaspoonful 5 times a day.

TO DELAY HARDENING OF PLASTER PARIS.

Add beer or milk. If plaster is old, put in a pan over fire.

HOW TO PREPARE ANTISEPTIC GAUZE.

Take ten yards of cheese cloth, boil in water, and after it is dry place in a solution of liq. Sodæ chlor. (1 pt. to 2 pts. water), and allow it to remain in this solution for forty-eight hours, after which time it should be taken out, dried, and placed in a jar of sul. corros. sublimate (1-5000) until wanted, when it should be taken out and wrapped in protective. Just before using it should be put in a sol. of corros. sublimate (1-000), and then squeezed out, when it is ready to be put on the patient.

IODOFORM GAUZE.

Dip dry gauze in sublimate solution (1-5000) and pepper it well with iodoform.

TO MAKE SOLUTION OF CORROSIVE SUBLIMATE.

R Corros. sub., 30 grs.
Glycerine, ½ drm.
Water, 1 oz.
Salt, 20 grs.
Sig. Two teaspoonful to pint of water equals 1-2000.

ABSORBENTS.

Take clean cotton, boil it, dry it, and then place it in a 1 to 5 Labarrque solution, and put it in a solution of boracic acid, 15 grs. of boracic acid to 1 oz. of water.

HOW TO PREPARE SPONGES.

Get nice sponges, string them, and whip thoroughly until sand and dirt is out of them, then put them in a solution of liq. sod. chlor. (1 to 5), and allow them to remain for forty-eight hours. Then dry them and keep in a glass jar.

Method No. 2.—Whip, put in sol. permanganate potassium (5 grs. to 1 oz. water) for one half hour. Take out, wash in clear water, then dip in a solution of oxalic acid (1 oz to 40 ozs. water); leave in one-half hour, then wash out in clear water and let them dry in sun or hot oven.

CATGUT SUTURES.

For majority of operations four sizes of cat gut are needed—E, A, and G violin strings and minor harp. For amputation G strings. Take the strings, cut off the ends, and place them in bottle containing either alcohol or ol. juniper berries.

DRAINAGE TUBES.

Take chicken bones, place them first in ether, then in a 33 per cent. solution of hydrochloric acid for twelve hours, after which put in alcohol until needed.

ON CARDIAC WEAKNESS.

The functional disorders of the heart presenting themselves so frequently and in so varied expressions to the practitioner are not infrequently a severe tax upon his diagnostic acumen and his capacity to afford relief.

Aside from the cardiac depression resulting as an expression of sympathy from some existing pathological condition in the system, or some definite organic lesion, there is a functional weakness of the heart, due to faulty innervation of that organ. Dr. Seeligmuller, of Halle, speaking before the last meeting of German physicians in Madgeburg, held that this form of cardiac weakness could always be traced to two causes, viz., habitual sexual excitement without corresponding satisfaction and continued intense brain-work with insufficient allowance of sleep.

In the more definitely developed cases we find general weakness, excitement, and palpitation of the heart, pains in the epigastric region, profound reaction after even moderate physical or mental exercise, deepening occasionally almost into coma, persistent insomnia, hyperchondrical depression, failing nutrition in spite of good appetite, pallor, and slight cyanosis of the extremities and naso-labial region, and occasional fomication in hands and feet. If we examine the heart at different times of the day we can always note the weakness of the apex-beat and the heart-sounds, and the smallness of the pulse. The state of inanition is most favorable to present all symptoms of cardiac weakness. After arising, such patients usually have a pulse of about 40, after breakfast of about 50, and do not obtain a pulse of 60 before taking some wine or eating some meat. The normal frequency of the pulse is scarcely ever or only transiently reached. In very pronounced cases we meet with steno-cardiac paroxysms. Next to this persistent extreme cardiac weakness there is a mild, intermittent form often connected with great excitability of the heart (irritable weakness). Every excitement causes palpitation, tea or coffee insomnia, in these patients. It is difficult to decide in the single cases whether the seat of the neurosis be in the pneumogastric or sympathetic nerves or in the medulla oblongata. Intense mental impressions, no matter whether of a pleasant or unpleasant nature, tend to aggravate the existing evil. Persisting pains, neuralgic in especial, and traumatic accidents, cause likewise a frequent aggravation of the affection. Women having passed through confinements often complain of this ailment, possibly on account of the concentration of the blood in the abdomen. Improvement is generally obtainable in these cases by the wearing of a suitable abdominal bandage. In persons of an advanced age abnormal dilatation of veins in the lower extremities often leads to cardiac weakness.

The therapeutical measures to be employed are chiefly related to proper physical exercise, regulation of diet, and change of air. A sufficient allowance of sleep, especially before midnight, is to be insisted upon, and resting during daytime, even if sleep is not obtainable, is to be recommended. All violent physical strains are to be strictly avoided, while methodical, moderate gymnastical exercises, especially walking, are salutary. Forced cold-water cures are injurious, while warm baths, taken several times a week, are indicated. The diet ought to be strengthening and abundant. Coffee, tea, alcoholic stimulants and tobacco are to be entirely avoided. A prolonged stay at the seashore or in the mountains has often proved a beneficent measure. The thermo-baths of Gastein enjoy an especial reputation for this affection.—*Therapeutic Gazette.*

LOCAL APPLICATIONS FOR NIGHT SWEATS.

London Medical Record (abstract) Dr. Radakoff found Tinct. Belladonna very successful. His rules are: Apply freely so that the skin remains moist a lotion composed of one drachm of the tincture and one ounce of water. Undertake the rubbing not earlier than one or two hours before the usual time of occurrence of the sweats. This plan succeeds in 49 out of 50 cases. Dr. Nikolai recommends sponging of the entire body with a solution composed of 2 drachms of chloral hydrate in 2 glassfulls of equal parts of nates and brandy at a temperature of about 70° F. His best results were obtained in children suffering from non-phthisical night sweats.

COCAINE IN THE TREATMENT OF INFLAMED NIPPLES.

The limits of usefulness of cocaine do not seem to have been reached. The sphere of its therapeutic activity, is, on the contrary, constantly increasing. One of the peculiar features of the remedy is the promptness and constancy of its action. Its latest employment is that advanced by Unna in the treatment of inflamed nipples, in which affection he holds it has no rival in marvelously removing both pain and soreness. Every physician knows how troublesome and difficult it is to cure a fissured nipple if a baby is nursing it. To afford prompt relief, even while the child nurses, has not been hitherto accomplished. Cocaine is said to have succeeded in all cases tried by Unna and others. The nipple is to be brushed every ten minutes, in the intervals of nursing, by a weak solution (one-half to one per cent.) of the hydrochlorate of cocaine. Within one or two days the fissure will have healed completely, and all pain consequently will have completely disappeared. The bitter taste of the drug does not prevent the child from nursing, nor is there any danger of its absorption and consequent untoward effects in the child. It would even possibly benefit the child when irritable and restless.—*Therapeutic Gazette.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, OCTOBER, 1885.

THE SMALL-POX EPIDEMIC.

The epidemic of Variola which is playing such terrible havoc among the French-Canadian portion of our population, at the time we write (Oct. 26) shows no sign of abatement. The deaths are in the neighborhood of fifty a day, the large percentage being children under 5 years of age, who have never been vaccinated. The City of Montreal, somewhat late in recognising the possibility that the disease would take a strong hold on here has at last realized the serious state of affairs, and, assisted by a most energetic Citizens' Committee are working vigorously to stay the disease. Mount Royal Hospital, capable of holding some 300 beds has been opened on ground outside the city and is almost full. Additional accommodation is being rapidly added, and we have every hope that by the time this article will be read not less than a 1000 beds will be ready for occupation. An Isolating Committee are at work and are meeting with a certain degree of opposition. This is, however, fading away before the determined attitude of the Health Authorities, and we have every reason to hope that within a month every case in the City of Montreal will be effectually isolated. This done, we may reasonably hope that the disease will within another month be completely under control and rapidly disappear. The large amount of material which Montreal has susceptible to the disease, is due to the fact, that since the last epidemic—some five years ago—vaccination has not been carried on to any extent among the children born of French-Canadian parents. This is due largely to the most extraordinary antipathy which, as a class, they have against vaccination, but also to apathy of many of the physicians and midwives who attend them. The latter are greatly blameable, and are, in our opinion, responsible for the state in which matters now are. Some of them are anti-vaccinators at heart, which discreditable position makes them the scorn of the civilized world. Others, while believing in the efficacy of the operation, have not the courage to face the torrent of superstition and ignorance which surrounds them. We hardly know which to blame most. Although largely confined to the poorer French Canadian element the disease has appeared to a limited extent among the English-speaking population. A small number of deaths have occurred among them, but, as a rule, the cases are mild. In most of the cases where death has taken place the evidence of a primary vaccination was poor, and re-vaccination had never been performed. We have not heard of a single case occurring after a recent re-vaccination. We need hardly say that the damage to the business of the city is enormous, almost beyond calculation. We regret to add that some persons in sister provinces have attempted to make money out of our misfortunes. Good luck can hardly

follow money so obtained, while the scorn of all honest men will surely follow such contemptible efforts to obtain business. For the moment the City of Montreal is bowed down with sorrow, but the shadow will soon pass away, and the energy of her people will rapidly restore to her that trade which has made her—not only the chief trading city of the Dominion, but one of the most beautiful cities on this continent. Fifteen years ago the writer of this article—then a public vaccinator for a large section of the city of Montreal—drew the attention of the Health Committee to the constant danger of small-pox which beset the city from the yearly increasing number of unvaccinated children, and suggested the speedy adoption of civil registration as the best means of securing the vaccination of the greater number. This advice was repeated on several subsequent occasions, but it was deemed a boon impossible to obtain in this Province, owing to the system of religious registration in use. We are, however, pleased to state that the present epidemic is not without its bright side. It has shown those from whom opposition to civil registration was said to be sure to arise, that if small-pox is not to have constantly waiting for it thousands of victims, this can alone be accomplished by a thorough system of registration such as is on the statute books of England and of France. They now admit this fact, and where opposition was seen ten years ago, we now believe we may expect cordial support. In the meantime we hope that some of the practitioners who live in our suburbs will realise the obligation which science has imposed on them—and, by example and precept, proclaim to their misguided countrymen that in *vaccination* and re-vaccination we have an all but absolute preventive of "La Picotte" or Small-Pox.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held on the 30th of September in the Medical Department of Laval University in the City of Quebec. The chair was occupied by the President, Dr. C. E. Lemieux. A resolution of condolence was passed with reference to the death of Dr. Alfred Jackson of Quebec, who for many years had been one of the Governors of the College.

Dr. Simard took his seat as one of the representatives of Laval University. The Board had been duly notified of his election.

The report of the Preliminary Examination Board was read. It showed that 56 candidates presented themselves, 23 of which were rejected on certain subjects while 5 were rejected for general deficiency. Two gentlemen who were in the North-West doing military duty, and who were therefore unable to go up for their Preliminary examination in May last (as they intended) made application for a favor. In September each was rejected on a single subject. They asked that if successful in passing these subjects next spring, that they be allowed to count the commencement of their studies—from September of this year. Upon a division this was granted them.

The report of the Treasurer from September, 1884, to September, 1885, showed a balance on hand of $1155.68.

The report of Mr. de Lamirande, the Agent of the College, showed that he had not been idle, and that several convictions for illegally practising had been obtained. The report of Committee on the financial condition of the College, presented at the last meeting of the Board was on motion adopted, with the exception of the recommendation to reduce the salary of the Registrar, which continues as heretofore. This report provides that there may be only one meeting of the College in the year, and raises the fee of the license to $25. These changes cannot come into force till adopted by the Legislature. A Committee composed of Drs. Lemieux, George Ross, F. W. Campbell, Hingston, Lachapelle, Austin, P. E. Mignault, Marcil, Marsden, Desaulnier, Ladouceur, Lanctot, Roger, Guay and L. La Rue were named to take into consideration the suggestions named at the last Tri-Annual Meeting of the College, with regard to the method of electing the Governors. The notice of motion given at the previous meeting, anent a Central Examining Board, as in Ontario, was referred to this Committee, which is to meet in Montreal.

A resolution affirming the Board's opinion as to the incontestible value of vaccination, as a safeguard against small-pox was unanimously adopted.

The following gentlemen took out the License of the College:

Graduates of Victoria College—Hilaire Gendreau, Alfred Laurendeau, Alfred Morin, Ferdi-

nand Simard, T. Daniel Caisse, Lucien Proulx, Arcadus Toupin, Joseph Jetté, Hormidas Brodeur.

Graduates of McGill College.—Henri Dazé, W. A. De Wolff Smith, W. Galt Johnston.

Graduates of Laval.—Chas. F. X. Prevost, Hector Palardy, Chs. N. Gauvreau, Louis A. Gagné, Gaston G. Smiltes, Louis F. Lepage, Leon O. Noel, Louis P. Picard, Joseph Houle, Jos. N. Legault.

Graduates of Bishop's College—Jabez B.Saunders, Frank R. England.

It was decided to print yearly the additions to the Register.

McGILL FACULTY OF MEDICINE.

The Medical Faculty of McGill College opened their new building on the 22nd of October, when there was present many friends of the School, and a large number of students. Representatives were also present from other Medical Schools in the city. D. R. P. Howard, the Dean, occupied the chair. Dr. Osler, formerly a Professor in this Faculty, but now of the University of Pennsylvania, and Dr. Pepper, of the same school, were present, and addressed the students in eloquent and appropriate terms. The new building is in every way admirably adapted for its purpose, and we wish the Faculty every success in their new quarters.

In the evening the Faculty entertained a number of friends to a dinner in the Ladies' Ordinary of the Windsor Hotel. The gathering was a very pleasant one, and it was two o'clock in the morning before the party separated, the Venerable Chancellor of the University, Hon. James Ferrier, remaining to the last.

CANADA MEDICAL ASSOCIATION.

The Eighteenth Annual Meeting of this Association was held at Chatham on the 2nd of September under the presidency of Dr. Osler. The attendance was good, and several papers of interest were laid before the meeting. It was decided to meet at Quebec next year. The following officers were elected for the year 1885-86:

President—Dr. Holmes, Chatham.

General Secretary—Dr. Stewart, Montreal.

Treasurer—Dr. Sheard, Toronto.

Vice-Presidents—For Ontario, Dr. Sloan, Blyth. Quebec, Dr. C. Sewell, Quebec. New Brunswick, Dr. Earle, St John. Nova Scotia, Dr. Wickwire, Halifax. Manitoba, Dr. Brett, Winnipeg.

Local Secretaries—Ontario, Dr. Wishart, London. Quebec, Dr. Bell, Montreal. New Brunswick, Dr. Lunan, Campbellton. Nova Scotia, Dr. Almon, Jr., Halifax. Manitoba, Dr. Good, Winnipeg.

COMMITTEES.

On Publication—Dr. Kennedy, Montreal; Dr. Fulton, Toronto; Dr. W. H. B. Aikins, Toronto.

Medicine—Dr. Cameron, Toronto; Dr. F. W. Campbell, Montreal; Dr. Saunders, Kingston.

Surgery—Dr. Kerr, Winnipeg; Dr. Kains, St. Thomas; Dr. Waugh, London.

Obstetrics—Dr. Holmes, Chatham; Dr. McKay, Woodstock; Dr. Campbell, Seaforth.

Therapeutics—Dr. Oliver, Kingston; Dr. Sloane, Blyth; Dr. Tye, Chatham.

Necrology—Dr. Fulton, Toronto; Dr. Graham, Toronto; Dr. J. C. Cameron, Montreal.

Education—Dr. Pyne, Toronto; Dr. Sheard, Toronto; Dr. Adam Wright, Toronto; Dr. Botsford, St. John; Dr. Allison, St. John; Dr. Arnott, London.

Public Health—Dr. Yeomans, Mt. Forrest; Dr. Grant, Ottawa; Dr. Harding, St. John; Dr. Robillard, Ottawa; Dr. Laberge, Montreal; Dr. Botsford, St John; Dr. Playter, Ottawa; Dr. Covernton, Toronto; Dr. Oldwright, Toronto; Dr. Boyce; Hon. Dr. Parker, Halifax; Dr. Kittson, Winnipeg.

THE melancholy death, by drowning, of Mr. H. P. Gisborne, manager of the Canadian branches of the New York Pharmacal Association, the Maltine Co., and Messrs. Reed & Carnrick, of New York, will have been learned with regret by many of our readers. Deceased was accompanying two friends to the Island in Toronto Harbor where one of them resides, but failing to gain access to the boat-house of the Argonaut Rowing Club, where a boat belonging to one of the gentlemen was kept, an attempt was made to enter the building by a window which was several feet distant from an adjoining wharf. Mr. Gisborne's companions passed over in safety, but, in making the jump, that gentleman must have missed his footing, and, in falling into the water beneath, struck his forehead on a projecting beam. The water was only about five feet deep, but it is said that de-

ceased never rose to the surface. It was some twenty minutes before the body was found when life was pronounced to be extinct. The occurrence took place on the evening of August 16th. His brother is the well-known superintendent of the Government Telegraph and Signal Service. As a business man Mr. Gisborne was well known. He made many warm friends and his loss will be deeply regretted. The management of the business has been, meanwhile, placed in the hands of Mr. R. L. Gibson, who has heretofore been acting as the representative on the road, and has been carried on as usual.

MATRIMONIAL.

Dr. Perrigo, Professor of Surgery in Bishop's College, who is to be married early in November, was entertained at a Dinner given by his professional friends at the Windsor Hotel, on the 29th of October. A number of unique presents was presented to the worthy Doctor whose health was heartily toasted. The chair was occupied by Dr. Kennedy and the vice-chair by Dr. Rodgers.

IODOFORMIUM ABSOLUTUM.

The Chemische Fabrik auf Aktien, Berlin (late E. Schering) has recently taken out a patent for the manufacture of iodoform by electrolysis, and has given the name of Iodoformium Absolutum to the product.

The iodoform thus produced is absolutely pure; it is a mild smelling, silky, delicate, and soft scaly powder of a pure citron yellow color. It can be easily reduced to a fine powder by trituration. It is no higher in price than ordinary iodoform, although iodoform as sent out now is a very different article in its physical properties from what it was a few years ago. There is still room for improvement, and those who are in the habit of using it much will welcome the advent of the new preparation.

LOCAL AND GENERAL.

I suppose there is no escape from discussing the issues that arise out of the small-pox epidemic, but I must confess that it is a subject fraught with slight interest for the Montreal medical man. He sees the ordinary means of arresting the plague neglected until it is too late, and then looks on while they are enforced with an enthusiasm worthy of a better cause.

Beyond vaccination and the isolation of patients in fairly well vaccinated districts I don't see that anything worthy of the name has been done to prevent the infection of the whole city. It is infected now, and, beyond the use of the small-pox hospitals for those who cannot be properly looked after at home and the vaccination of those who are not already protected, I do not see that it is worth while wasting money on such measures as isolation and placarding.

Thirty sanitary policemen to isolate two thousand cases of small-pox!

If there were not something extremely pathetic about the feeble eighteenth century notions of sanitation prevalent in this city one might consider this *the* joke of the season, but the idea of initiating genuine house isolation *in this city* at this stage of the epidemic with anything like twice thirty policemen is to invite the contempt of those who really do know something about the way in which the disease called variola attacks a city.

I have said *this city*, and by that I mean a city of (with its suburbs) 150,000 inhabitants, fully one half of which were not vaccinated effectively when the plague broke out, fully one-quarter of which are unvaccinated now,—probably the majority of these are opposed to and will resist vaccination in the future. I refer to a city the majority of whose inhabitants belong to the same class intellectually and physically that fell victims to cholera in the South of France, in Spain and in Italy—who are indifferent about sanitary matters, who ascribe, with apathetic fatalism, the visitation of the disease to *le bon Dieu*, and do not quarrel with His wise decrees; who rose, like the corresponding class in Barcelona during the cholera, and attacked the Health Office, and who wield just enough political influence to fetter the hands of men who, if left free to act, would conduct themselves like men, and not make the name of our city a term of reproach.

"They do these things better in France." When small-pox reaches other cities, the majority of whose citizens are of a different intellectual calibre, genuine isolation, genuine disinfection, and prompt vaccination are sternly insisted upon. No waiting for a small-pox hospital to be re-opened and furnished; no wasting of valuable time; no bandying of words; and no stupid consulting of the whims and wishes of the patient and his friends.

P. A. LAVERS, M.D.

OBITUARY.

Dr. H. L. Vercoe (M.D., McGill, 1865) died at Toronto on the 28th of July last. He had practiced in Seaforth, Ont., for some years and gained the esteem of a large *clientele*.

Dr. J. R. Vicat (M.D., McGill, 1867) died lately in South Carolina from phthisis. He practised for many years at Richmond, Que., and was greatly esteemed.

Dr. W. G. Metcalfe, who died last August from a wound inflicted by a patient in the Rockwood Lunatic Asylum, Kingston, was a graduate of Toronto University, 1872.

PERSONAL.

Dr. John J. Gardner, Professor of Anatomy in Bishop's College, has been appointed physician to the Protestant Small-pox Hospital in Montreal.

Dr. Wolfred Nelson, (M.D., Bishop's, and M.D., McGill, 1871) has been appointed Medical Inspector for the New York Life Insurance Company for South America.

Dr. F.W. Campbell, of Montreal, returned to Canada by the Allan SS. Parisian, on the 27th of Sept.

Dr. Wyat G. Johnston, (M.D., McGill, 1884) has been appointed Pathologist to the Montreal General Hospital.

Dr. F. R. England, (M.D., Bishop's College, 1885) has returned to Canada—after six months passed in London, and commenced practice at Point St. Charles, Montreal.

The Rev. J. B. Saunders, M.D., Bishop's College, has been appointed Professor of Botany in his Alma Mater.

Dr. J. Wolf. Smith, (M.D., McGill, 1882) after some service on the line of the Canadian Pacific Railway, has commenced practice in Montreal.

Dr. C. O. Reilly, Superintendent of the Toronto General Hospital, after spending three months in Europe, returned to Canada by the Allan SS. Parisian, September 27.

Dr. McNeece, (M.D., McGill College, 1869), has been appointed Assistant Health Officer for Montreal.

Dr. Major has returned to Montreal after spending seven months on the European continent.

Dr. Buck (M.D., McGill, 1862), Superintendent of the London Lunatic Asylum, has been granted four months' leave of absence, to recruit his health, which is somewhat broken down.

Mr. Keith, of Edinburgh, the celebrated Ovariotomist, lately paid a flying visit to Boston to consult with a surgeon of that city.

REVIEWS.

THE TECHNOLOGY OF BACTERIA INVESTIGATION.

Containing explicit directions for the study of bacteria, their culture, straining, mounting, etc. According to the methods employed by the most eminent investigators. By C. S DOLLEY, M.D., published by S. E. CASSINO, & Co, Boston.

The Author presents this work with the hope that its perusal will stimulate careful study of the Schizomycetis by American investigators, and assist them in adding their share to the mass of facts concerning bacteria. If a condensed compilation of most that is known regarding the methods for investigating bacteria, presented in a comprehensive and convenient form, will accomplish this purpose, the Author's hopes should be realized.

The subject is considered in three divisions: In Part First general directions are given of the methods of obtaining bacteria from air, earth and water, and from the tissues of healthy living organisms, the methods of making microscopical preparations of bacteria, the various methods of staining, and the preparation of bacteria for photography are described.

A description is then given of the methods of conducting culture experiments, how to prepare culture media, the various sterilization methods, etc. How to conduct inoculation experiments, and methods for biological analysis, such as ascertaining the effects of sunlight, cold, heat, electricity and upon bacteria. The determination of their chromophyll, assimilating power, and the effects of antiseptics and poisons upon them, concludes this Part. Part II. describes the special methods for investigating pathogenic bacteria. The various diseases in connection with which bacteria have been found are considered seriatim, and the methods for studying the organism fully described. Part III. gives formularies for the preparation of the various staining fluids. Culture, media, mounting media, etc. To the working student in bacteriology, or those intending to become such, this book will be found invaluable, the only want felt in perusing it is that of illustrations, in the way of plates, cuts, etc. There is an entire absence of such; they would make the book more attractive, and greatly assist the student in comprehending the numerous descriptions. A useful feature of the book is the references to the literature on the subject under consideration, which appear at the end of each section; the names of the writers are given, with the title of the article and name and date of the journal in which it appears.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, NOVEMBER, 1885. No. 2

CONTENTS.

ORIGINAL COMMUNICATIONS.
Gynæcological Report..... 313
SOCIETY PROCEEDINGS.
Montreal Medico-chirurgical Society..... 314
PROGRESS OF SCIENCE.
Foreign Bodies in the Vagina..... 319
The Influence of High Altitudes upon Pulmonary Consumption.. 324
The Importance of Shampooing and Gymnastic Exercise in the Treatment of Epilepsy..... 326
Aphasia..... 327
On the Treatment of Migraine..... 328
Incontinence of Urine in Children. 329
Acute Peritonitis Treated by Abdominal Section..... 330
Tannin as a Specific for Carbuncle 330
Medicines which Stimulate the Liver..... 331
The Treatment of Epistaxis..... 331
How to Shrink Hypertrophied Tonsils by Caustic Applications 331
Carbolic Acid in Indigestion..... 331
Iodide of Potassium in Inflamed Breast..... 331
Pruritus of Women..... 332
EDITORIAL.
Local and General..... 333
Mrs. Southworth's Famous Books.. 335
Peterson's 25 Cent Series..... 335
The Smallpox Epidemic..... 335
Personal..... 335
Correspondence..... 336

Original Communications.

GYNÆCOLOGICAL REPORT.

BY E. H. TRENHOLME, M.D.,
Professor of Gynecology, University of Bishop's College.

Hysterectomy in cancer of the uterus.

Le Progrès Medical reports a case of vaginal hysterectomy performed by Dr. Tillaux for cancer of the neck of the uterus and metrorrhagia. As the womb was freely moveable it was easily brought down to the vulva with forceps. A sound was placed in the bladder, and having cut through the vaginal mucous membrane in front at its union with the neck, and detached it as far as the peritoneum, which was incised transversely, Dr. Tillaux then made a similar operation behind, where the womb was attached by the two broad ligaments only; these ligaments were then ligated and divided; the vaginal edges were brought together by one suture. A drain was placed under the peritoneum and the vagina washed out with iodoform gas. The drainage tube was removed on 4th day, and the patient discharged cured on the 21st day.

Dr. Terrier also reports a similar case, with equally favorable results.

The value of hysterectomy in cancer of the uterus is by no means a settled question. Much has been said against the operation—cases of cancer and the rate of mortality has been high—in fact, the operation is declared by some as unjustifiable.

From my own observation I am of opinion that it is a justifiable operation, when the disease is confined to the uterine organ and has not invaded the adjacent tissues. A case of extirpation was performed by myself some weeks ago, and though the patient has recovered from the operation without any serious drawbacks yet, the result has not been satisfactory, on account of the development of the disease among the pelvic tissues, the eradication of which at the time of the operation it was found to be impossible to accomplish. One serious objection to these operations is the drainage of the peritoneal cavity, which must result when the infiltrated condition of the adjacent tissues prevents the coaptation of the divided structures.

Taken early, before the cancerous disease has gone beyond the uterus, the extirpation of the organ seems to me to be a proper and justifiable procedure

The operation for Restoring the Uterus by shortening the round ligaments has lately been performed by Dr. Alexander, of Liverpool.

If the conception of this operation cannot be accorded to Dr. Alexander, yet to him is due the credit of being the first to demonstrate its practicability. The mode of operating is given as follows:—The first incision is to be made upon the pubic spine, and then extended upwards and outwards in the direction of the inguinal canal for 1½ or 3 inches, according to the depth of the subcutaneous fat and the skill of the operator. The fat is cut through till the glistening tendon of the external oblique is reached. Sometimes a dense aponeurosis is met with midway in the fat, which may be mistaken for external oblique, and lead to trouble if search is now made for the tendon of the external oblique. The first stage of the operation ends with the exposure of the tendon of the external oblique and the external inguinal canal with the inter. columnar fibres crossing it. If these structures do

not appear then the aperture must be dragged over the surface of the tendon till the ring is found. The finger now pressed in the wound readily detects the spine at one end by its hardness, and the ring at the other by its lessened resistance. The spine and the ring are the two landmarks for further procedure. Poupart's ligament below should warn against any searching for the ring below that structure. There should be no groping in the dark, all must be closely ascertained before the next step is taken. Cut through the inter-columnar fascia and deeper structures over all the extent of the external ring in its longest diameter. A nerve, vessels, fat, tendinous bands, and the round ligament spring out of the canal immediately. In fat people the quantity of fat conceals all the other structures. There is to be no haste to seize the round ligament, which is brought into view by everting the structures upward. The genital branch of the genito-crural nerve runs close to and along the anterior surface. At this point the ligament is round, often delicate, but easily recognized by its flesh-colored structure. Care must be taken lest it be destroyed by the forceps. Bands will be seen binding it to the adjacent structures, these are best divided with the scissors, taking the greatest care lest the ligament should be cut into. With patience and care it is freed, and comes out so easily that one is apt to think it has been broken.

At this stage it is well to cover the wound with a warm sponge and operate on the other side. The best position for the operator is on the side opposite to the one operated upon, as it affords the best view, and also enables him to make traction in the direction of the ligament.

Bands of fascia and fasciculi of the internal oblique have been mistaken for the ligament. They are, however, more friable, and, though they seem to go along the canal in the direction of the ligament, they do not pull out and should not ever be seen if the operation is properly made.

Third Stage.—This stage consists in placing the uterus in position with a sound, and pulling out the ligaments till they control the uterus. This is determined by the operator drawing out both ligaments at once till the sound (held by an assistant) is felt to move. The ligaments are now held by an assistant while the operator stitches them to both pillars of the ring, two stitches of moderately fine catgut on each side.

The bruised ends of the ligaments are cut off and the remainder stitched into the wound with the same suture that closes the incision. A fine drainage tube is inserted, and the wound well washed with anteseptic lotion before the sutures are secured. In private practice Dr. Alexander does not use the spray, but always employs a drainage tube. In cases of retroversion and prolapsus he uses a Hodge pessary to keep the organ in position during convalescence. Rest in bed is insisted upon for at least three weeks. The most important point in the 3rd stage is to secure the proper tension upon the ligaments. The drainage tube is removed on 2nd day.

The danger to life is *nil*, in an experience of over 3 years, whilst it has been successful in the case of retroversion and retroflexion as well as in cases of prolapsus of the uterus.

Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Annual Meeting, October 9th, 1885.

T. G. RODDICK, M. D., PRESIDENT, IN THE CHAIR.

The annual meeting of this Society was held on Friday evening, October 9th, a large attendance of members being present.

The following were proposed for membership: Drs. R. F. Ruttan, W. McClure, F. G. Findley, S. Gustin and D. W. Eberts.

PATHOLOGICAL SPECIMENS.

Dr. TRENHOLME exhibited an *Ovarian Cyst* and *Two Extirpated Uteri*, and gave the following particulars:—

The ovarian cyst was removed from Mrs. I., of Shawville, aged 42, of spare habit and nervous temperament. Nine years married; no children. Her illness began 16 years ago, when her bladder troubled her. Feeling of pressure, pain in the back, inability to sit; bowels constipated; insomnia; menses always irregular, but for the last six months has no flow. At present time, pains are not so severe as formerly, and chiefly felt in the back and over the womb. Upon examination, the uterus is found high up and pressed above the pubis, but in the median line. A large dense tumor is felt to the back of the womb filling up the brim of the pelvis. This tumor is firm to the touch, smooth and uniform. On the left antero-lateral aspect of the tumor, a small

body is found connected with it. This was thought to be (as you now see it is) the left ovary. The tumor itself reached almost to the umbilicus. The depth of the uterine cavity was three inches. The tumor reached nearly as high as the umbilicus in the centre of the body, and well back toward the spinal column. The diagnosis was doubtful; at first inclined to ovarian cyst, originating with displaced ovary, but subsequently, from consideration of the history and the doubtful mobility of the uterus, etc., this was changed to uterine fibroid. As nothing special depended upon a more accurate diagnosis, the removal of the tumor was clearly indicated. The operation for this purpose was performed 12th Aug., 1885, assisted by Drs. Kennedy, Cameron, Perrigo and Reddy. There were also present Mrs. Lyon, Morrison and Saunders. The usual medium incision, three inches long, was made, and when the tumor was reached its real character was apparent. There were many adhesions both to the peritoneum and the uterus, those to the latter quite strong. About O iv of clear fluid were removed by Fitch's trocar, which, by the way, disappointed me in its working. A few bleeding points were secured by hemp ligatures and the sac of the cyst removed. The abdominal incision was closed and dressed in my usual way. The patient did well, the chief after-trouble being due to her nervous condition and some irritation of the bladder. Though rather prematurely, she left for her father's home in Iroquois on the 3rd of September, just three weeks and one day after the operation.

Extirpation of a Cancerous Uterus.—This specimen was removed from a lady 42 years of age. The general appearance of the patient was that of good health. For some months past she had been suffering from pains in the pelvis and left groin, which had become so severe that she consulted me about her case early in August of this year. Upon examination, the os was found to be cancerous, and the disease had invaded the upper part of the vagina on the left side to a slight extent. The depth of the uterus was about three inches, the organ movable, and in normal position. Believing the diseased tissues could be removed with some chance of success, and of possible temporary relief—at the patient's repeated and earnest request—the extirpation of the uterus per vaginam was performed on 20th Aug., 1885—seven weeks yesterday. In this, the first and only operation of the kind in Canada that I know of, I was assisted by Drs. Kennedy, Cameron and Perrigo—a number of medical men and medical students being also present. *Operation.*—After reaching Douglas' pouch, the fundus was brought down by means of a strong vulsellum; the right broad ligament was then ligated in small segments and divided. In this there was no very great difficulty; but when I attempted a similar procedure with the left ligament, to my dismay I found it so densely infiltrated with the disease that I had to content myself with dividing the remaining structures, guided by the sense of touch alone. There was but slight hemorrhage, and after the removal of the uterus I scooped out a quantity of cancerous tissue with Thomas' serrated spoon. There was some slight hemorrhage a few hours after the operation, which was easily controlled; and but for the escape of the peritoneal fluid, which has given the patient a great deal of trouble, and also kept her weak, she has done well, and is now able to walk around her room. I trust, in a few days, she will return to her home. One remarkable feature in this case was the almost entire absence of suffering from the operation itself. The opening of the cavity of the peritoneum, as in this operation, becomes a serious contra-indication to its performance, inasmuch as it cannot be closed by sutures on account of the infiltrated state of the tissues rendering impossible an approximation of the edges of the wound.

Dr. GARDNER congratulated Dr. Trenholme on the success of the operation, but thought the case not a good one to select for this operation, as there was ample evidence of infiltration of the broad ligament. In such cases, gouging or scraping is all that should be attempted.

Drs. KENNEDY and HINGSTON also spoke aganist operating in these cases.

Dr. ALLOWAY gave a short description of a similar case under his care. He thought operating unjustifiable.

Dr. SHEPHERD asked Dr. Trenholme if his patient was in a better condition now than before operating, or if she was going to live longer. Dr. T. said she would not probably live longer, but she was free from suffering, and therefore better than before the operation.

Fibroid Tumor of Uterus (2 lbs).—The second specimen of extirpated uterus is of more than ordinary interest to me, as well as to the profession, because it is the uterus of the first woman who, in January, 1876, was spayed for the control of uterine

hemorrhage. The first operation gave the patient nearly ten years' lease of a life that was rapidly drawing to a close when the ovaries were removed. In fact, last March she was robust and fleshy, but foolishly undertaking exessive laborious work, congestion of the uterus was developed, with a distressing train of nerve symptoms that of late threatened a termination of her life. Her attacks of nervous distress occurred every nine days and lasted for nine days, and were followed by loss of flesh and strength. During the attacks the uterus greatly increased in size, and her symptoms were all referable to that organ. As all conceivable treatment, including incision of the tumor, etc., was of no avail, she determined to have the uterus and tumor removed. *Operation*, 24th Sept., assisted by Drs. Kennedy, Perrigo, Cameron and Armstrong, and a number of medical visitors and students being present.—The usual abdominal incision had to be somewhat modified so as to remove the cicatricial tissue of the former wound; this, of course, necessitated the division of a few muscular fibres of the recti muscles. The tumor was firmly packed in the pelvis, and strongly adherent almost all over its surface. The attachments to the bladder were markedly so, and led to the mishap of incising that viscus to the extent of about half an inch. After separating the uterus from its supports, etc., as far as the neck, a wire écraseur was passed around the latter, and tightened just sufficiently to control any hemorrhage. The tumor and uterus were removed by the V incision (as performed by myself many years ago), in the same way as in the last case operated upon in London, Ont., in May, 1883. The flaps were adjusted—after carefully securing all the arteries—by the double-running suture, the material used upon this occasion being the prepared iron silk. The bladder was sewed up in a similar manner. The cavity was cleansed and the wound brought together in my usual way by deep silver and superficial horse-hair sutures. A carbolized gauze pad over the wound, held *in situ* by three short straps of adhesive plaster, completed the toilet. It is now two weeks and two days since the operation, and, as the chart of temperature, etc., shews, her convalescence has been a remarkable one. The bladder has given no trouble, and, from present appearances, it will not be long ere this lady, for the second time, will be restored to the active duties of life.

Nephrectomy (first recorded case in Canada):—Dr. HINGSTON exhibited a kidney removed by him for hydronephrosis. The kidney was made up of a lot of cysts, containing, when pressed, a fluid similar in appearance to ovarian fluid, which became of caseous appearance on evaporation. The parenchy-matous structure was all gone. No calculus or obstruction was found. The ureter, at the pelvis, was not discernible—nor exteriorly. The lateral operation was employed; there was no difficulty, and but very little general disturbance followed. The patient had suffered from hæmaturia and great pain in the right side.

Dr. Hingston, on being requested, promised to give a paper on this case at the next meeting. Dr. Shepherd, who had also removed a kidney lately, said he would read a paper on his case at the same meeting.

ELECTION OF OFEICERS.

Balloting for the election of officers for the ensuing year then took place, with the following results:—

President—Dr. T. G. Roddick (re-elected).
First Vice-President—Dr. J. C. Cameron.
Second Vice-President—Dr. Geo. Wilkins.
Treasurer—Dr. James Perrigo.
Secretary—Dr. D. F. Gurd (re-elected)
Librarian—Dr. T. D. Reed (re-elected).
Council—Drs. Geo. Ross, Kennedy and Rodger (re-elected).
Publication Committee—Drs. Kennedy, Geo. Ross, J. C. Cameron and Bell.

Dr. RODDICK thanked the Society for the honor done him, and said that at some future time he would give an address on the history of the Society.

A vote of thanks was tendered Dr. Molson for his past services as treasurer.

Dr. HINGSTON said that nine years ago, during an epidemic of smallpox, the Society passed several resolutions upholding vaccination, etc. He thought it might do good to endorse these now, and proposed the following resolutions:—

Be it resolved,—That this Society reiterates the opinion expressed nine years ago in favor of vaccination, and considers it to be the duty of every physician to diligently encourage, at the present time, the practice of vaccination and re-vaccination.

Resolved,—That the Secretary be authorized to publish the above resolutions in the city press.

Special Meeting, October 12th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

A special general meeting of the Society was held to consider what action it should take with

reference to the proposed appointments by the Board of Health of a Committee of Physicians to visit at times and report upon the Civic Smallpox Hospital.

It was unanimously resolved :—

First.—That the Society has learned with much satisfaction of the completion of ample hospitals for the reception and satisfactory treatment of several hundreds of smallpox patients; that, judging from the reports of many medical gentlemen who have inspected the buildings, this Society is satisfied that the hospitals are eminently suited for the purpose intended, and will materially aid in giving the health authorities control over the present epidemic.

Secondly.—Whereas the members of the Society have learned of many incidents forcing upon them the conviction that the management of the Civic Hospital has been very far removed from what it should be to merit the confidence of the public, and they are aware that this feeling has prevented many physicians from advocating isolation of their patients by removal to the hospital, as well as caused many patients to refuse to leave their homes,—be it now resolved that, as it is of the utmost importance to secure public confidence in the entire management of the Mount Royal Hospitals, the Medico-Chirurgical Society respectfully urge upon the Board of Health the necessity for the appointment of a committee of well-known physicians whose duty it shall be to visit the hospitals at stated periods, examine into the management of all the departments, and report to the Board. Resolved, further, that it be a recommendation to the Board of Health that this committee consist of five members, to be composed of one from each of the medical schools and one, from the profession generally.

Thirdly.—Resolved, that the members of this Society, having learned that it is the intention of the Board of Health to appoint two resident physicians, one for each section of the Mount Royal hospitals, they hereby express their approval of such action, believing that it will be conducive to the best interests of the patients.

The Secretary was instructed to forward these resolutions to the Board of Health.

The meeting then adjourned.

Stated Meeting, November 6, 1885.

THE PRESIDENT, THOMAS G. RODDICK, M.D., IN THE CHAIR.

TUMORS OF THE OVARY.

Dr. WM. GARDNER presented two ovarian tumors which he had removed from the same individual; the right one had been removed by enucleation of the cyst, and the left by ligature of a very broad pedicle. Troublesome hemorrhage occurred, which was with difficulty arrested by ligature and the thermo-cautery. The patient did well.

Dr. TRENHOLME also presented a large ovarian tumor which he had that day removed, and which, on the right side, contained a large solid mass, which he looked upon as malignant.

FATAL PULMONARY EMBOLISM ARISING FROM SIMPLE FEMORAL THROMBOSIS.

Dr. GEORGE Ross exhibited the heart and lungs of a patient, under his care, who had died suddenly in the General Hospital. The pulmonary artery, on being laid open, showed its left branch plugged by a thick fibrinous clot, beginning an inch above the valves, the lower end lying loose in the main artery, and for some distance curled back upon itself. Still nearer the heart, and almost touching the valves, lay a second loose clot, about three-quarters of an inch long, having the same appearance as the first. The clotting extended far into the lung, and even some of the small bronchial branches were plugged. The right pulmonary artery and its divisions were quite similarly occupied by an extensive fibrinous deposit. The femoral vein was also shown, containing a clot several inches in length, and extending a long way down the internal saphenous vein.

The patient was a young woman who had presented the usual symptoms of a simple anæmia for some months, when she developed pain and swelling of the right leg. She was then admitted to the Montreal General Hospital, under Dr. Ross, when the existence of a femoral thrombosis was readily detected by the presence of a firm cord in the situation of the vessels. Her general condition was good, with the exception of a moderate degree of anæmia. One week after admission, after having passed a good night, she complained early in the morning of suddenly feeling faint; this soon passed off, and nothing more was thought of it. At 12.45 P.M she became suddenly breathless and much distressed. Stimulants were administered, but in fifteen minutes she was dead. The occurrence of pulmonary embolism was immediately suspected, and at the postmortem the condition already described was found.

Dr. Ross remarked that, although very frequently meeting with femoral thrombosis, it was the first time he had ever observed this fatal accident following from it. It had been his misfortune a short time since to meet with a sudden death ten days after a natural confinement, and a perfectly natural puerperium. An autopsy in this case likewise showed the fatal result to have occurred from pulmonary embolism, as had been suggested. The present case was of interest from the syncopal attack in the early morning, which no doubt was

produced by surprise of the heart at the arrival of a foreign body. Dr. Ross said he had been very much struck in both these cases by the great extent of the clotting through the branches of the pulmonary artery which must have taken time to form, although no pulmonary symptoms prevailed during that period.

EXCISION OF THE SPLEEN.

THE PRESIDENT (Dr. Roddick) exhibited portions of a spleen which he had removed a few days ago from a man in the General Hospital. The man had been struck by a loaded bucket of coal whilst in the hold of a vessel. The bucket, containing about a half a ton of coal, had fallen from a height and crushed him against the side of the ship. When brought to hospital he was suffering severely from shock, greatly blanched, and almost pulseless. There was a small wound in the left lumbar region between the last rib and crest of the ilium, which was bleeding freely. There was also fracture of several of the lower ribs on left side. Dr. Roddick enlarged the wound, and found that he came immediately on the intestines, the intervening muscular structures being all torn away, leaving nothing but skin covering the intestines. Through this wound he removed a mass of tissue, which, on examination, proved to be a portion of spleen; the wound was enlarged still further, and the hemorrhage was found to come from a ruptured spleen. The vessels entering the ilius were ligatured, and the spleen was without difficulty taken away.

The man only survived the operation about six hours. At the post-mortem the lower six ribs on left side were found fractured, the left kidney lacerated in several places, and the bladder full of blood. There was only a few ounces of blood in the abdominal cavity.

GUNSHOT WOUNDS OF THE TESTICLE.

Dr. JAMES BELL read a paper on gunshot wounds of the testicle, and reported two cases which he had seen in the late Northwest rebellion.

The first case was that of a young soldier, aged twenty-eight, who, whilst skirmishing before Batoche, was struck by a rifle-bullet on the outer side of thigh immmediately below and behind the great trochanter. On being brought to the field hospital it was discovered that the bullet had passed through the thigh, then entered the perineum at the root of the scrotum, and made its exit through the scrotum, carrying away a portion of the testicle. The portion of testicle that remained was extruded from the lacerated scrotum. After removing several pieces of clot in the track of the bullet, the parts were cleansed with weak carbolic lotion, the injured testicle was returned to its proper place, and the scrotal wound closed with catgut sutures. There was no hemorrhage or other troublesome symptom, and the wounds were dressed with iodoform and carbolized gauze. The patient was now sent by steamer to the base hospital at Saskatoon. On his arrival(some days after the injury) he was found to be suffering from urinary infiltration, due no doubt to sloughing of the tissues and the perineum, injured by the bullet. Extensive sloughing occurred, and his life hung in the balance for days, but the scrotal wound never reopened, although most of the left side of the scrotum sloughed away. When last seen, July 1st, his wounds had all healed; the right testicle was about half its original size, firm, free from pain and tenderness, and freely moveable in the scrotum. It had apparently quite recovered from the severe wound received two months previously.

The second case was that of a half-breed, æt. 32, who was found on the battlefield of Batoche, on the night of the 12th of May, severely wounded. He was brought to the field hospital for treatment, and was found to be suffering from a contused and lacerated wound, about two inches in diameter, on the back and outer part of left thigh, just below the great trochanter. The abductor longus muscle was torn and partially separated at its origin. The left testicle and the whole lower two-thirds of the scrotum were carried away. The right testicle hung down uncovered, and its lower half was filled with fragments of metal. The wounds were probably caused by the bursting of a shell. The wounds were washed and dressed, and the pieces of metal removed from the testicle. In a few days the lower half of the right testicle sloughed off, leaving an irregular granulating surface. The other wounds did well, and after a few days Dr. Bell dissected back the remaining portion of the scrotum, pared the edges, and brought them together over the testicle. The result was very satisfactory, for in a few weeks the scrotum was completely healed, and the remaining portion of the right testicle could be felt firm and painless within it.

Dr. Bell went on to say that the success attending the expectant treatment in these two cases

inclined him to the belief that hardly any laceration of the testicle could be so severe as to warrant castration, although from what he had been able to gather from the literature of the subject within his reach, immediate removal of the organ was recommended in severe injuries. All authors say that the injured testicle usually atrophies, and is sometimes the seat of neuralgic pain, so that, as far as future usefulness went, it might as well be removed at once.

The patients, however, are always pleased to have as much saved as possible. In the statistics in the surgical volume of *The History of the American Rebellion* the expectant treatment seems to have given better results than active operative interference; 586 cases are reported. The testicle was extirpated in 61 of these: 18 per cent. died. Of the remainder, treated by the expectant treatment, 11.9 per cent. died.

SEPARATION OF THE FIRST AND SECOND PIECES OF THE STERNUM.

Dr. BLACKADER reported a case of a young man aged eighteen, who, whilst exercising on the parallel bars in a gymnasium, felt something give away. On examination it was found that the first piece of the sternum was riding on the second; it was reduced without much difficulty, and kept in place with compresses and straps.

FRACTURE OF THE CLAVICLE WITH WOUND OF THE LUNG.

Dr. F. W. CAMPBELL reported a case of fracture of the clavicle, in a coachman, aged thirty, caused by falling off his carriage and striking his shoulder on the wheel as he fell. The outer fragment was driven backward, and the lung was evidently wounded, as there was a large amount of air in the cellular tissue. The man when first seen was in a semi-collapsed condition, and the whole neck was emphysematous. At first he was in doubt as to whether or not there was a fracture of the first rib, so he was sent to the General Hospital.

Dr. RODDICK remarked that wound of the lung is a rare complication of fracture of the clavicle, and that there are very few cases on record. The man had been under his care in the hospital, and it was with difficulty that he could get the outer fragment into position. But the man is now doing well, and the bones are in good position.

Progress of Science.

FOREIGN BODIES IN THE VAGINA.*

By THEOPHILUS PARVIN, M.D., of PHILADELPHIA.

The vagina has been more frequently the receptacle of foreign bodies than has any other cavity of the human organism, and the variety of these bodies has been greater.

Among those which have been voluntarily or accidentally introduced by the female herself, may be mentioned † hair-pins, toilet-pins, needle-cases, crochet-needles, pebbles, spools, a pepper-box, a cotton veil, sponges, the bobbin of a spinning-wheel, the reel of a sewing-machine, lead-pencils, jelly-moulds, pewter cups, the neck and shoulders of a corked vial, the cup of a drinking flask, the socket of a brass candlestick, and the head and bust of a china doll. In regard to the last foreign body referred to, the history ‡ of the case was briefly as follows: A mulatto girl, thirteen years of age, in June introduced a doll's head and bust in the vagina, and in the succeeding November first complained of the suffering its presence caused; she assured her mother that she had swallowed the doll—her name was probably Sapphira—and it was only when partially anæsthetized she confessed that she put it in her vagina; both the truth and the baby came out under the influence of chloroform.

The motives which have led woman or girls to voluntarily place foreign bodies in the vagina have been many, though not as numerous as the cases. A purse of money has been put in the vagina for concealment; a sponge has been placed at the mouth of the womb just before coition, in order to prevent conception, and forgotten until many months after, when deterioration of health, offensive discharge and hemorrhages from the vagina, and pain, led to the suspicion, if not the diagnosis, of cancer. In some cases the foreign body has been pushed, in thoughtless play, into the mouth of the vagina—sent on a sort of exploring tour, just as children drop pebbles into a well, or throw them in a cave; while in others, a morbid desire for sympathy, or to attract attention, may have been the motive for its introduction. In some cases the foreign body has been put in the vagina to stop the monthly flow; in two instances, girls menstruating for the first time—ignorant, surprised, and fearful at the discharge of blood—sought to arrest it by putting a spool in the vagina. In some cases the voluntary introduction

*Read before the Philadelphia County Medical Society.

† Some in the list are taken from Briesky, "Die Krankheiten der Vagina," Billroth's "Handbuch der Frauenkrankheiten," while the authorities from which many of the others have been derived will be mentioned in the course of the paper.

‡Dr. Smith, New Orleans Medical and Surgical Journal, February, 1884.

of these bodies can only be attributed to an insane freak, or an arbitrary and unreasoning exercise of will, just as we have given in one of Juvenal's Satires, an example of a mistress who has her slave causelessly whipped, declaring, if my Latin be not at fault, *Voluntas sit pro ratione.*

In many instances, the foreign body has been introduced purposely, but has been accidentally retained. Thus a girl* has used a needle to make her menstruation freer, or a woman a hair-pin to procure abortion, and the instrument escaped from her grasp.

In some cases the foreign body has been used for therapeutic purposes, and broken or become detached in the vagina. Thus a woman,* while taking a vaginal injection, loses the nozzle of her syringe; a troublesome leucorrhœa leads her after two months to consult a physician, and the lost body is found in the vagina. There are several cases reported where glass vaginal syringes have broken while in use, and the fragments remained in the vagina. In one of my patients, a married lady who had suffered from vaginismus, spontaneous fracture of one of Sims' glass dilators occurred when it was in the vagina, greatly to her surprise and alarm.

The foreign body may have been forced into the vagina by sitting down on it, or by a fall. A school-girl, on taking her seat, does not observe that a pencil is erect on it—the head below, the point above—and the pencil is thrust into the vagina, its point penetrating the bladder.

Jansen, of Ostend,† has reported the case of a woman who had an ale-glass, two inches and a half in diameter and three in height, in her vagina, which she asserted had entered from her sitting on it.

Trapenard‡ narrates the case of a woman sitting down on a faggot, being one of a pile; the faggot slipping, she falls some distance to the ground, and a triangular piece of glass and three spines of the acacia are forced into the vagina.

Salzer‖ has narrated the case of a girl, thirteen years old, who in a barn, slid down a pile of hay several feet high, and thrust into the vagina the iron part of a "heurupfer," which was lying concealed in the hay near the floor; the part of the instrument entering the vagina was nearly four inches long, and included the pointed end, and the projecting hook two inches in length.

But according to Breisky,§ the most frequent accidental introduction of foreign bodies into the vagina has occurred in self-abuse—the body used escaping from the hand, and the party being unable to reach or to remove it.

The foreign body may be formed in the vagina. It is not uncommon to find in a patient who has suffered for some time from a large vesico-vaginal fistula, calculous concretions on the vaginal wall in the vicinity of the abnormal opening.

The foreign body may have come from an adjacent cavity. In case of recto-vaginal fistula, or where there is complete rupture of the perineum fæces may be in the vagina, So, too, this accident has occurred even when the rupture of the perineum is only partial, as in the case of a young physician's wife, detailed by Breisky.*

Intestinal parasites may pass directly through a recto-vaginal fistula, or over the perineum, into the vagina. Thus there have been found in the latter oxyures, and the ascaris lumbricoides; but these are estrays, not true parasites of the female sexual organs.

Hausmann, in his work upon "Parasites of the Female Sexual Organs," states that in two instances he has found not only the ascaris lumbricoides in the vagina, but also the eggs; moreover, he has found in the vagina the eggs of the tænia solium. He mentions, too, a very curious fact, finding the itch insect in the vagina of a woman who had no external evidence of the presence of this parasite, the skin entirely free from disease, and he regards it as not at all improbable that under such circumstances the acarus was introduced in coition, for, according to Kuchenmeister, the acarusis in many cases abundantly reproduced upon the penis.

It may happen that a uterine fibroid undergoes calcareous degeneration, and some of the calcareous fragments, or the entire tumor, enter the vagina. Dr. Goodell† has given an illustration of the former, while Gaubius‡ has furnished one of the latter occurrence. The patient of Gaubius was a virgin who had a uterine calculus so large that after it entered the vagina he could not remove it until he incised the vaginal mouth.

The greatest number of vaginal foreign bodies are tents, tampons, and pessaries—introduced for therapeutic purposes and left, through carelessness or by accident, after these therapeutic purposes have been accomplished.

Uterine tents expelled from the uterus have remained injuriously in the vagina. Elliot‖ has reported the case of a woman who, thirteen months after labor, suffered severe pain in the pelvis, and had such an offensive vaginal discharge that she thought she had "mortification of the womb." Upon examination, a tampon was found in the vagina, which had been placed there just after her labor to stop hemorrhage.

The number of cases in which pessaries have remained an injurious time in the vagina is very great, and hardly a practitioner of five years' experience who has not removed these foreign bodies. The late Dr. Atlee was accustomed to say in medical meetings, when the subject of pessaries was under discussion, that he had removed

*Schmidt's Jahrbucher, 1870, p. 308.
* Le Med. Practicien, January, 1882.
† Lancet, vol ii, 1850.
‡ Archives de Tocologie, 1881.
‖ Berliner Klinische Wochenschrift 1875.
§ Op. cit.

* Op. cit.
† American Journal of Obstetrics, May, 1883.
‡ Journal de Medicine, par Vandermonde, 1759.
‖ Boston Medical Journal, 1837.

more pessaries than he had ever introduced; plainly it was impossibly for him to accept Dr. Hodge's views of uterine pathology and therapeutics, as it was, for a time at least, for Dr. Hodge to accept Dr. Atlee's opinions and practice in the treatment of ovarian tumors. But, apart from exclusive views, very many pessaries, unsuitable in form or size, or unnecessarily applied, or worn for too long a time, need to be removed. In reading some of the histories of removal of such foreign bodies, one is often struck with the great length of time which they have been worn before their injurious effects compelled seeking professional advice.

Sutton* removed a glass ball pessary that had been in the vagina fifteen years; Desormeaux and Dubois † mention a case where a silver-gilt pessary had remained for twenty-five years; Goodell removed a glass disk after thirty years' imprisonment; and Sabatier ‡ had a patient who had worn her pessary forty years.

It does seem extraordinary that the vagina ever tolerates these foreign bodies so long a time, and yet a case reported by Pearse || is almost as remarkable: his patient had had a cotton veil in the vagina for twenty years. So, too, the case reported by Hauff is very remarkable. A nullip.,§ twenty years of age, had introduced into her vagina a coffee-cup, eighteen centimetres in circumference, and three and a half centimetres in diameter; it was removed entire after having been worn two years and a half.

So far, reference has been made to foreign bodies that have been introduced into the vagina by the patient herself, or by accident, or by the physician for therapeutic purposes. Foreign bodies have been put in the vagina, by men, from thoughtless or designed cruelty. A country girl had worn for years, before coming under the care of Dupuytren, ¶a pomade-pot in the vagina; some brutal soldiers, after making her the unwilling victim of their lust, had thrust in this foreign bo d

Among other of these abominable cruelties may be mentioned the introduction of the cone of a fir tree,* a turnip,† a large crystal of sulphate of copper,‡ a wine-glass, etc. Gunsberg || gives the case of an idiotic woman whose husband forced into her vagina a wine-glass, the stem of which was broken off; twenty-four hours after the cruelty was inflicted the wine-glass was removed not without some laceration of the vagina, a forceps and Sims' speculum being used in the removal.

Instead of one foreign body there may be two or more. Schroeder § mentions a case under his care in which there were a cockchafer and a pomade-pot in the vagina; in Trapenard's case, previously stated, there were four foreign bodies; other illustrations are furnished by the fragments of a broken syringe, by some cases of vaginal calculi formed in consequence of a vesico-vaginal fistula, and by oxyures. But the largest number of foreign bodies is given in those instances where a needle-case has been introduced closed, and when in the vagina is opened, the needles then escaping; Grenier ¶¶ has given two cases in which this occurred.

An interesting case has been given by Dr. Graham,** where there was not only a foreign body in the vagina, but there was also one in the bladder —a spool in the former and a hair-pin in the latter; the spool had been in the vagina three years, and it was supposed that the hair-pin, which was bent in the form of a crook, had accidentally entered the urethra when the patient was attempting to remove the spool.

In considering the consequences of foreign bodies in the vagina, the least frequent will be referred to first.

There may be a serious wound of the vagina immediately resulting from the foreign body. In several of the cases where glass syringes have broken in the vagina, the latter has been wounded. Dr. Oldham †† has narrated a case in which death followed such wound; the death occurred the twelfth day, from internal hemorrhage.

The foreign body may enter adjacent organs, or penetrate into neighboring tissues, partially or completely passing out of the vaginal canal. In a patient under the care of Dupuytren,* an ivory pessary, which she had worn for many years, had partly entered the bladder, and partly the rectum, so that it occupied not only the vagina, but the other cavities mentioned. The same condition was present in the case of Desormeaux and Dubois.†

In the case of the girl 15 years old, who had the vagina entered by a lead-pencil, the point penetrating the bladder, there was a calcareous deposit upon the part within the bladder. The removal, which was done six months after the injury was received, could not be accomplished until after an incision of the vesico vaginal wall was made.

Those cases in which the foreign body passes into the uterus, partially or completely, are most remarkable. The late Dr. Crowe, of Louisville, Ky., reported a case in which a Babcock's pes-

* Supplement to the American Journal of Obstetrics, January, 1882.
† Dictionnaire de Medecine.
‡ Medecine Operatoire, Paris, 1882.
|| British Medical Journal, vol. i., 1878,
§ Centralblatt fur Gynæcologie, 1879.
¶ Bibliothèque du Médicin-Practicien.
* Breisky, op. cit.
† Breisky, op. cit.
‡ Medical Times and Gazette, 1863.
|| Centralblatt fur Chirurgie.
§ Diseases of Women.
¶ Theses de Paris, 1834.
** Nashville Journal, 1858.
†† Lancet, vol. i, 1870.
* Bibliothèque du Médecin-Practicien,
† Op cit.

sary had in part entered the womb; in the *New Orleans Medical and Surgical Journal*, 1883, a case is given in which the socket of a brass candlestick, three inches and one-fifth in length, four-fifths of an inch in diameter, and having a rim an inch and a half in diameter, was found in the uterus; this foreign body had first been introduced into the vagina.

Dr. Lever ‡ reported the following case: A woman while applying some ointment by means of a bone netting-needle, to allay irritation of the vagina, is disturbed by some one unexpectedly entering the room, and sits down suddenly; the instrument is forced into the vagina, and through the vaginal wall; in her efforts to remove it, it passes entirely out of the vagina and lies in an oblique direction to the right side of the latter. Nearly seven months after its introduction, this foreign body, which was six inches long, was removed, the removal being preceded by dividing it.

The foreign body remaining in the vagina may be incrusted by a mineral deposit. This deposit is composed of the triple phosphate and calcium salts. One of the most interesting specimens of such incrustation was presented, a few years ago, to the Philadelphia Pathological Society, by Dr. Getchell. ‖ This calculus had been removed from the vagina of a girl nineteen years of age: it was three inches long, one inch and a quarter wide, three-eighths of an inch in thickness, and had been formed about a hair-pin as a nucleus. In the discussion following the presentation of the report and the specimen, the view taken by those Fellows who discussed the origin of such formations, was that they were usually derived from urinary salts. Such origin may be admitted as probable, though by no means proved, if there be a genito-urinary fistula; but if there be no such abnormal communication, how can urine enter the vagina, especially its upper part, where the foreign body is most frequently found? Breisky, in describing the effects of these foreign bodies in producing irritation, etc., of the vagina, states that the deposit comes from the stagnant secretions in the vagina, and he compares the foreign body thus incrusted to a foreign body in the bladder which serves as the nucleus for a vesical calculus.

A remarkable case of vaginal, uterine, and vesical calculus under the care of Prescott Hewett * occurred some years ago at St. George's Hospital. The patient had introduced into her vagina, eleven years before, the neck and shoulders of a large corked vial. The portion of the vial was covered with calcareous matter, and was in the vagina; the os uteri was blocked up with a mass which proved to be the cork similarly incrusted, and there was a calculus in the bladder: this patient had a small urinary fistula at the fundus of the bladder.

‡ Medico-Chirurgical Transactions, vol. xxxi.
‖ Philadelphia Medical Times 1873.
* Medical Times and Gazette, 1854.

In some of the cases where perforation of the vesico-vaginal wall has occurred, the tissues gradually worn away by the foreign body, it has not been mentioned that any urine escaped from the vagina, and yet the portion of the foreign body remaining in the latter was covered with abundant incrustations; in one of these cases where the rectum and the bladder had each been entered by a part of the foreign body, so perfectly were the openings plugged by the body, it is expressly stated there was neither a urinary nor stercoral fistula.

Another consequence of the presence of a vaginal foreign body observed in some cases is the production of abundant granulations from that part of the vaginal wall with which the body is in contact, so that after a time the latter is more or less completely imbedded, hidden from sight and touch, it may be. There may be associated with this a very marked stenosis of the vagina, the lower portion being of full size, while a small aperture leads to the upper part which contains the foreign body.

In the case where a large piece of sulphate of copper was passed into the vagina, sloughing of the entire vaginal mucous membrane resulted. The victim was a girl seventeen years old, and the perpetrator of the crime a young man who introduced the foreign body after having had intercourse with the girl. A few hours after its introduction it was removed, and then weighed six drachms and a half.

In general the effects produced by these foreign bodies depend upon their form, size, material, the greater or less violence done in their introduction, and the length of time they remain.

They usually produce more or less irritation of the vaginal mucous membrane, with increased secretion. In many cases an obstinate leucorrhœa, compelling the patient to seek professional advice, leads to the discovery of the foreign body. The increased vaginal discharge is at first mucous, then muco-purulent, or purulent, or it may be serous, but after a time becomes more or less offensive in odor—in some cases so offensive as to suggest malignant disease, a suspicion which may be confirmed by the occasional or frequent occurrence of hemorrhages. The foreign body may interfere with the functions of neighboring organs, especially those of the bladder and rectum; hence vesical irritability or dysuria, or rectal tenesmus, in some cases dysentery.

The vaginal surface may be abraded, or ulceration of the walls occur from pressure of the foreign body; adding to these the offensive character of the retained vaginal secretions, we have the conditions which may lead to septic infection.

Kottman* has reported a death from this cause in a woman twenty-five years old, who introduced a spool into the vagina, and who had suffered from leucorrhœa several years. The spool was found

* Schmidt's Jahrbucher, 1875.

behind the cervix in the vaginal vault, and removed; symptoms of peritonitis were well marked, and the patient died; the post-mortem showed purulent exudation in the pelvic peritoneum, especially in the recto-uterine cul-de-sac at a point corresponding with that which the spool had occupied in the vagina.

Runnals † has reported a case of death from pyæmic pneumonia and peritonitis, occurring in a girl of twenty-four years, caused by the retention of a piece of sponge in the vagina; the measurements of the sponge, removed after death, were three and a half by two inches.

A girl, ‡ eighteen years of age, was admitted into Hotel Dieu, Orleans, apparently in the last stages of marasmus, and complaining of hypogastric pain, and diarrhœa. The next day she died, and upon post-mortem examination, there was found in the vagina a pewter cup, which had been introduced fourteen months before; it is stated that the cup could not be removed before dividing the pubic joint.

Dr. Kelly,* of Philadelphia, was consulted by a woman seventy-five years old, who had worn a pessary fourteen years without inconvenience, until recently difficulty in defecation and urination, together with an offensive vaginal discharge, led her to seek professional help. The doctor, not without considerable difficulty, removed the pessary, but the woman soon manifested a typhoid condition, and died three weeks after the removal.

The presence of a foreign body having been determined by vaginal examination, by touch, mediate or immediate, by sight, where possible, and the vaginal examination assisted, if necessary, by examination through the bladder and the rectum, the plain indication is to remove the foreign body.

Here one cannot refrain from stating the very great advantages the practitioners of to-day have given them by Sims' speculum and anæsthetics in such removal.

An anæsthetic is not necessary in all cases, but is especially in children, and when the foreign body is large.

So far as methods of removal are concerned, these vary with the size and form of the body, and its material, and as to its being free or fixed in the vagina. In many instances the conditions require a new method to be devised.

In some instances the foreign body can be best removed by acting on it through the rectum. Thus Meissner removed a pebble from the vagina of a girl 2½ years old; of course very much less violence was done by the finger in the rectum than if it had been introduced into the vagina. Small round bodies can be best removed by throwing into the vagina a stream of water, while the perineum is retracted by Sims' speculum. The removal of fragments of glass, especially of a syringe, is often difficult; if forceps be used there is danger of breaking the glass, or of wounding the vagina; in the only two cases I have had to remove the pieces of a broken glass syringe, this was done by the fingers, and, in general, flat bodies are thus best removed.

One of the most ingenious devices for the removal of fragments of glass was used many years ago by Dr. Levis. A woman had a broken glass pessary in the vagina, and the efforts that had been made to remove the pieces had only resulted in reducing them to smaller pieces, comminuting them in fact; a severe vaginitis—due chiefly to the fragments of glass, but in part, probably, to the attempts at extraction—was present when the patient came under the care of Dr. Levis. He threw into the vagina by means of a syringe a mixture of plaster-of-Paris, and after two or three days removed the mass, the solidified mixture having fixed in it the various pieces of glass. This unifying process, so ingeniously resorted to by Dr. Levis, seems like a material illustration of Plato's axiom that the end of philosophy is the intuition of unity.

In some cases it has been necessary to reduce the size of the foreign body before extracting it. Thus Dupuytren broke the pomade-pot, and, by means of strong forceps, devised for the purpose, divided the ivory pessary in the vagina and in the rectum, removing one part through the latter, the other through the former. In other cases the vaginal orifice has been enlarged by incision, as was done by Gaubius for the removal of the calcified uterine fibroid, and by Sutton for the removal of a globe pessary. If granulations have fixed the foreign body, these must be detached by the finger, or divided by scissors.

If the foreign body have its size greatly increased by mineral incrustations, it is advised to remove these first. Another reason for their removal lies in the fact that in some cases the rough, jagged surface may injure the vagina when extraction is done. Sabatier speaks of his fingers being wounded by the "asperities of saline incrustations," which had made the tumor "as rough as a rasp."

In some cases the ordinary polypus forceps is an excellent instrument for removal of a foreign body, but this removal should then be made by sight rather than touch—a Simon or a Sims speculum being used to expose the vaginal cavity.

In others the foreign body has been so large that the obstetric forceps has proved necessary for its removal. Roux, probably, was the first to use the instrument for this purpose, though some since his day have suggested its utility, imagining they were proposing something new; this is like many other novelties in the medical world which are exhumed from the grave of years, or even of centuries.

Whatever means, manual or instrumental, are used for the removal of foreign bodies from the vagina, it is well to be guided by the words which

† British Medical Journal, July, 1882.
‡ Lancet, vol. i., 1848.
* Medical News, Philadelphia, 1884.

Blundell said could be usefully inscribed on one of the blades of the obstetric forceps : *Arte, non vi.*

In all cases where there is an offensive vaginal discharge, or any erosion or ulceration of the vaginal walls, antiseptic injections should precede, and for some time follow, the removal of the foreign body.—*Phil. Med. & Surg. Reporter.*

THE INFLUENCE OF HIGH ALTITUDES UPON PULMONARY CONSUMPTION.

Dr. Irving M. Snow thus writes in the *N. Y. Med. Jour.*, June 13 : The treatment of pulmonary consumption has, at all times, been unsatisfactory to the physician, by reason of the certain and often rapid progress of the disease to a fatal termination, The disease is, indeed, often palliated by medical skill, but relief is usually only temporary, and life is rarely prolonged more than three years. During an experience of thirty-eight years, Dr Austin Flint states that he has seen but seventy-five cases in which an arrest of the disease took place, and in most of these the improvement was for a short time. Every physician is called upon to examine and advise the victims of consumption. It is a disease in which the doctor is early and frequently consulted, yet one-seventh of all deaths are yearly attributed to this cause in the United States, and in Maine 50 per cent. of all deaths between twenty and forty years are from consumption.

From the failure of the materia medica to cope with this disease, attention has been drawn to the modifying influence of climate upon chronicpulmonary disorders. The conditions of soil and atmosphere favorable to the development of phthisis pulmonalis are well known. Damp, ill-drained land, cold, humid air, sudden changes of temperature, lack of sunlight, anti-hygienic surroundings—all contribute to depress the general health and to occasion the fearful prevalence of consumption in low-lying districts and in large cities. It is, therefore, evident that, in the search for a climate for the prevention or cure of consumption, dryness of air and soil and the invigorating influences of sunlight must be substituted, for the deleterious conditions of ground and atmosphere mentioned above. That climate is a potent agent in the prevention of phthisis pulmonalis is demonstrated by the fact that a region of comparative immunity from the disease is found in high altitudes. Consumption is excessively rare among the native population of New Mexico; and it is stated by Dr. Archibald Smith to be an exotic in the Peruvian Andes at an elevation of 6,500 feet. Kuchenmeister and Lombard have estimated the altitude of approximate immunity in Switzerland at 4,000 feet, and at the Equator 9,000 feet. Dr. Herman Weber, an unquestioned authority on medical climatology, has also testified to the rarity of phthisis upon elevated table-lands. We may also see the influence of altitude in our own country; that while the mortality in New York city is 20 per cent., at an elevation of 2,000 feet above the sea, only 10 per cent. of all deaths are attributed to pulmonary consumption.

In America Dr. Denison, of Denver, has placed the altitude of comparative immunity from phthisis at 6,000 feet, and quotes the vital statistics of Denver, which, in four years and a half, show but fourteen deaths from consumption originating in the State, two of which were acknowledged by the attending physicians to have originated elsewhere. The analysis of the conditions of climate found in this area of so-called immunity in Colorado becomes an interesting study.

As the traveler passes from eastern to western Kansas toward the Rocky Mountains the landscape gradually changes. In place of luxuriant vegetation, vast cornfields, and numerous streams, the prairie becomes parched and arid, the water-courses waste to dryness, and the whole prospect shows the absence of rain. This difference can be appreciated when we learn that the annual precipitation of rain and melted snow at Denver, 5,300 feet above the sea, is 14.77 inches as compared with New York, where it is 42.70 inches a year. This dryness is favored by the loose, sandy nature of the soil, which absorbs and radiates heat and moisture far more rapidly than impermeable rock or clay. Constant humidity of earth and air predisposes most strongly to the development of phthisis and other pulmonary disorders, while dryness of soil and atmosphere gives to the inhabitant of high plateaux comparative exemption from disorders of the respiratory tract. Laennec mentions a locality where the dampness of the soil was of such a character that two-thirds of the resident population died of phthisis. Variations of temperature are less acutely felt in dry than in moist climates, where cold is bitterer and heat more oppressive. The sun is obscured and hampered along seas and rivers by a veil of cloud or mist, but when we reach the plains of Colorado the atmosphere is of a silver clearness, and those who have felt the exhilaration and comfort afforded by the sunlight of Colorado will appreciate the increased power of the atmosphere in transmitting radiant heat. There is found to be an average difference of 43° between sun and shade in Colorado as compared with Washington, where the difference is 23°. A general rule is given by Dr. Denison that "there is a difference of 1° between sun and shade for each rise of 235 feet." This in part explains the enormous diurnal variation of temperature complained of by Dr. Alfred L. Loomis. The physiological effect of light is to stimulate respiration, as is demonstrated by the observations of Bidder and Schmidt, who, finding that animals at rest exhaled more carbon dioxide by day than by night, equalized the elimination of carbon dioxide by depriving the animals of light. To the consumptive, whose hope of life depends upon the amount of sunlight and outdoor exercise he can obtain, the value of a climate like that of Colorado may be appreciated when we contrast its 320 sunny days annually with Boston, where one-third of the year is cloudy.

In proportion to the elevation above the sea, the atmosphere becomes cooler, the temperature being 1° lower for every 200 feet of elevation above the sea. This difference is not arbitrary, being subject to modification by soil and prevailing winds. The rapid absorption and radiation of heat give rise to great extremes of temperature. As compared with the sea-level, the fluctuations of temperature in Colorado are indeed large, the variation in Colorado Springs in July being 30° daily and 63° monthly, as contrasted with San Diego, where the difference is 13° daily and 31° monthly, the climate of the California resort being tempered by the moist warm winds of the Pacific.

Physiologically, heat is opposed to the stimulation of the nervous centres, as is shown in the greater energy of northern than southern races. Its influence upon respiration is also depressing. The observations of Dr. Parkes show the number of respirations to be about thirteen to the minute in the tropics, and sixteen and a half in England. The value of a cool climate in arresting incipient phthisis is well known. Dr. F. I. Knight, of Boston, has expressed the general sentiment of the medical profession by asserting that "the cold, dry air of high elevations is beneficial in cases of incipient disease of the lung." That the symptoms of consumption are often palliated by moist, semi-tropical climates is true, yet the digestive organs lack the stimulus of cold, the patient is exposed to the dangers of malarial poisoning, and the heat of summer forces the invalid to leave his winter sanitarium, and seek a cooler and less debilitating climate.

With the rise above the sea-level the air becomes rarefied, and the atmospheric pressure is considerably diminished. At the height of 5,300 feet the atmospheric pressure is twelve and a half instead of fifteen pounds to the square inch, and the proportion of oxygen is diminished 16 per cent. This extreme attenuation of the air produces important changes in the economy. The mechanical effect of the rarefied air is to increase the frequency and depth of respiration, and to accelerate the pulse. A greater amount of air must be inhaled to satisfy the demand for oxygen. Hence the lungs have a tendency to be completely filled, the elastic tissue of the vesicles is stretched, and the thorax is expanded to its fullest capacity. At moderate elevations the system quickly adapts itself to the lessened atmospheric pressure, but, when great heights are rapidly attained, as with aëronauts, copious hemorrhages from the lungs ensue, and even at the altitude of Denver hæmoptysis frequently occurs in consumptives in the stage of excavation. Dr. Denison says: "The lessened tension of the air and the increased frequency of respiration force the blood to pass more quickly through the lungs, and the rapid and perfect renewal of capillary circulation is opposed to the stasis of early and chronic inflammation. This improved capillary circulation, together with the more perfect expansion of the thorax, loosens and promotes the expectoration of mucus and inflammatory *débris*." Tissue changes take place more rapidly near the sea than at considerable elevations. The usual experience of new-comers to Colorado is that they lose flesh, and that the sensible perspiration is considerably diminished. With the expansion of the thorax and the increased depth of inspiration, a development of auxiliary muscles of respiration takes place, and the children born in Colorado have a wider girth of chest than children born in the Eastern and Middle States. As the natural stimulus of an organ is the element upon which it acts, a lung filled and obstructed with pneumonic, caseous, or tubercular matter is mechanically aided to throw off the adventitious substances which obstruct the air-passages. The symptoms of hectic fever abate, and the consumptive, relieved from his night-sweats, chill, and harassing cough, is placed in a favorable condition for recovery. Finally, the rarity of the air produces complete and constant ventilation, which invalids secure by active or passive outdoor exercise. The purity of the air in Colorado is preserved by elevation above the sea, a thin population, and the constant influence of the sun.

The elements of atmospheric electricity and ozonized air I will not here discuss. Authorities state that the electric tension of the air is increased with elevation, as is also the amount of ozone.

The advantages of Colorado for pulmonary consumption have been too recently appreciated to enable me to present extended statistics as to its benefits. Relief is more certain to the consumptive who seeks the aid of its climate in the preliminary stages of the disease, before there is much loss of tissue. Of 202 patients, having been ill an average of two years before reaching Colorado, at the end of a year and nine months 47 per cent. were much improved, 22 per cent. were slightly improved, in 11 per cent. there was favorable resistance to the disease, and in 20 per cent. there were extension and advance. Among those of this number in whom the disease had reached the stage of excavation, at the end of two years, 35 per cent. had died, 40 per cent. were resident in the State, and the remainder had been lost sight of. Even this is a favorable showing for the last stage of a fatal disease. Often patients who reach Colorado with tubercular lungs in the stage of softening are obliged to seek a lower altitude, the morbid process being hastened in Colorado. Cases of uncured or chronic pneumonia and fibroid phthisis are frequently aggravated by the altitude and dry air, and cases in which tubercular infiltration is actively progressing, and those in which much lung tissue is involved, are not favorably influenced by Colorado. A contra-indication to high altitude exists in consumptives of advanced years with rigid chest-walls, and in patients with valvular disease of the heart.

A disputed point now comes up regarding the influence of elevation in hæmorrhagic cases. Patients in whom large cavities exist, with denuded blood-vessels near the pulmonary excavation, are

apt to have profuse hemorrhages from the stretching of lung tissue induced by the rarefied air. Dr. Reed, of Colorado Springs, has analyzed 70 cases in his own practice. Of 34 cases in the stage of deposit, 15 had bled before reaching Colorado, and in only one did hemorrhage recur. Of 34 in whom softening had taken place, 17 had hemorrhage, before and 7 after living in the State. The *rationale* of the cure in hæmorrhagic cases is ascribed to the cause of hæmoptysis, the breaking down of tissue being arrested. Nervous disorders, chorea, neuralgia, nervous headache, and also cardiac diseases, are often aggravated by the altitude. Yet I know a lady with lungs infiltrated with tubercule, with mitral insufficiency of the heart, and a martyr to facial neuralgia, a resident in the State about three years, who passes eight hours a day in the saddle, and is fond of mowing and irrigating her own lawn, who is an enthusiastic and jealous partisan of Colorado and its climate. That good results in phthisis are accomplished by a prolonged residence on the plains of eastern Colorado there can be no reasonable doubt, and cases of complete cure are not uncommon. Here is found a region sheltered on the west by the Rocky Mountains, which rise precipitously from the plain, the prevailing winds being from the south and east, possessed of a cool, dry atmosphere and a sandy soil, the heat being tempered in summer by daily showers. It would seem that all these conditions are favorable to the consumptive. The nearly invariable warmth of the morning allows the invalid to take daily rides or drives in the bright sunlight of a Colorado sky. Here is also found the stimulus, occupation. Invalids who have reached that stage of improvement which an active mind shows by a desire for occupation are able to find profitable employment in the diversified industries of the State. The vast cattle ranches furnish work for those who are able to live in the saddle. Gardening is a favorite pursuit. An Oxonian, whose lungs became tubercular during a sedentary student life, found profitable employment in selling strawberries from his own garden to the citizens of Colorado Springs.

Dr. Loomis objects to the Colorado climate on account of the enormous diurnal range of temperature. A perfectly equable climate was found in the Mammoth Cave, yet nearly all of the consumptives who engaged in that disastrous experiment perished in its sunless depths. If the lesser thermometric range of London and New York is more favorable to consumptives than the large diurnal variation of Colorado, why does phthisis pulmonalis decimate the population of London and New York while its development is rare in Colorado? Cold is most acutely felt in damp climates, and, moreover, the daily range of temperature in Colorado raises the heat to a point where the invalid can spend some hours in the middle of the day in driving or riding. During the winter of 1883, which I spent in Colorado Springs, in February the thermometer often sank at night to from 12° to 20° below zero, yet at noon the day was sunny and warm enough for hundreds of consumptives to drive up and down the streets of that pleasant little town; and it is further to be noted that this intense cold was not so disastrous to invalids as the damp, chilly winters common in the Eastern and Middle States. In conclusion, it may be said that the best results of the Colorado climate to consumptives are secured by a prolonged residence in the State, with the important auxiliaries of proper diet, clothing, and personal regimen, including discretion in taking active exercise.

THE IMPORTANCE OF SHAMPOOING AND GYMNASTIC EXERCISE IN THE TREATMENT OF EPILEPSY.

Dr. John Kent Spender thus writes in the *Brit. Med. Jour.*, May 2d: Whatever may be the healing virtue of "rest" in a surgical sense, there are diseases in the treatment of which too much bodily rest and too much sleep may be medically injurious; that is to say, they are injurious in adding to the lethargic dulness which is the natural sequel of certain morbid processes; so that our duty as physicians lies in counteracting, by outward means, the depressing effects of internal and invisible forces. I do not wish to say that drugs have been too highly estimated in treating epilepsy; their effects are more striking than in the treatment of most other diseases, and are one of the approximate certainties of medical art; but other remedial agencies have been valued too little. It may be proper to think of drugs first; but long ago Dr. Russel Reynolds recommended "wholesome mental exercise," and I wish now to add a plea on behalf of wholesome bodily exercise as well. Bodily exercise means bodily education, or the training of the muscles into stronger and more harmonious action; and by soothing and regulating the nerves, all the disorderly phenomena of epilepsy may be brought into comparative subjection and quietness.

Among the useful hints which have been offered by Dr. Radcliffe on this subject, he has warned us that the "sleepy epileptic" must be roused early, and made to leave his bed. Similarly, the stupid and idle epileptic must be summoned to his martial drill, and his senses kept "alive" by stir and movement. But even when the faculties are acute and femininely sensitive, the stultifying effects of the long-continued epileptic convulsion may be appropriately met by gymnastic exercises and systematic shampooing of the whole body. In February, 1884, Dr. Radcliffe kindly entrusted to my care an epileptic lady of middle age, refined in manner, but almost emaciated in form, and the mother of two healthy and happy young children. Medicines of a special kind had been long administered, including cod-liver oil; but, during the last few months, the steady improvement has been materially quickened by the following plan of action: The body is sponged with hot water every day; the arms are moved up and down frequently (this

expands the narrow chest), and clubs of moderate weight are raised with the hands. Walking in the open air has been encouraged on all possible days. Once a week, a professional shampooer comes and carries out a complete massage of the whole body. Two epileptic girls, children of farmers in a neighboring county, have rapidly improved under similar management.

What I have now written is probably quite familiar to experts in neurology; but Trousseau says nothing about it, and, in the best English monographs, the hygienic treatment of epilepsy receives scanty recognition. Assuming that a rational scheme of medication is adopted in any given case, I claim that regular shampooing and gymnastic exercises may greatly help our therapeutic work, and sometimes make all the difference between success and comparative failure.

APHASIA.

The *London Med. Times*, (April 11, 1885,)says: Aphasia may be briefly defined to be the loss of language owing to cerebral defect. This requires some further explanation. Language is to be taken in its widest sense as the faculty possessed by mankind of giving expression to the thoughts, either by word of mouth, gesture, or writing. The nature of the cerebral defect matters not, provided that its seat be the same; and, therefore, aphasia may come on with sudden onset or gradually, it may be preceded by coma and accompanied by hemiplegia, (with almost invariable custom) of the right side, and sometimes by anæsthesia also, or it may alone signify to the medical man the existence of cerebral disease, and may be a possible forerunner of even more grave mischief in the near future.

The loss of language may be, as the name would naturally imply, complete, but all degrees of incompleteness are also included. Some patients cannot utter a single articulate sound; others repeat one word in reply to every question or to express every want; the vocabulary of others is more extended, and may embrace half a dozen words, possibly all belonging to the same class; others again, misplace their words or only the terminations of them, a not uncommon form being that the patient uses the same termination to all his words. The intelligence in all these varieties may be unimpaired, and the patient is often much put out that he cannot succeed in so expressing himself as to procure his wishes being carried out. One of the most curious phases of this affection is where a person forgets entirely some one or more languages that he has been in the habit of using, but retains the power of conversing in another language which, it may be, he has had no occasion to use for many years past. It is possible that in such a case a close enquiry would elicit the fact that this particular language had been learnt at a different time from the others, perhaps at an earlier period of the patient's life, and consequently the memory of it may have been entrusted to cells not in immediate proximity to those harboring the other languages since acquired, the function of the latter alone having been abrogated by the malady under which the patient is laboring.

It will be obvious that, notwithstanding an eminent English authority, the present writer has decided to make no distinction between amnesia and aphasia. In so doing he is supported by all the most recent and most distinguished French writers, whose views have been very clearly summarized on this point in an excellent thesis lately published* which suggested the present paper. Amnesia, which really means loss of memory, cannot, it is believed, be usefully considered apart from aphasia, and it is for this reason that the definition of the latter term was made as comprehensive as possible.

Aphasia may be either sensory or motor. The former is the case when there is loss of the perception of spoken or written language; the latter includes the loss of articulate language, and of the power of writing. These various faculties may be lost independently, since they belong to different centres; but when the lesion is widespread they may co-exist. Word blindness consists in the inability to interpret the written symbols of language, and it is noteworthy that it may be present though the patient is able to recognize correctly the individual letters. It is invariably associated with either hemiopia or some concentric contraction of the field of vision. Moreover, it is always right hemiopia that co-exists with word blindness. Word deafness consists in the more or less complete loss of the recollection of the meaning of sounds; the patient is not deaf in the ordinary acceptation of the word, but is in the position of one who is addressed in a tongue with which he is not familiar.

This is not the least studied of the forms of aphasia, but in return it is the one from which recovery is most apt to take place.

Of the motor varieties, aphemia is the loss of the recollection of the co-ordinated movements necessary for articulate speech. It is at once the most important and the best-known form, being the most common. It is, in fact, the classic form investigated with so much care and success by Broca. Etymologically the term aphemia might be used, as it often has been, as synonymous with aphasia; but the writer of the present paper believes that the balance of advantages is immensely in favor of using aphasia in the widest sense. As has been already stated, aphemia may be present in any degree—from absolute speechlessness down to what hardly seems to amount to more than forgetfulness. It is worth bearing in mind that it is a symptom often assumed by the malingerer. Numberless synonyms have at different times been proposed for aphemia; a long list of them may be found in the thesis above-mentioned. Agraphia, the only

*De l'Aphasie, par le Docteur Bernard. Paris: Publications du Progrès Medical, 14 rue des Carmes.

variety which remains to be noticed, may be regarded as bearing exactly the same relation to writing that aphemia does to speech; in other words, it is amnesia of the co-ordinated movements necessary to writing. It is in every respect comparable to aphemia; indeed, the two often coexist. It frequently passes unnoticed, owing to the co-existence of right hemiplegia.

ON THE TREATMENT OF MIGRAINE.

To me migraine seems to be one of the many sudden discharges of energy which takes place at more or less regular intervals. and in obedience to more or less inadequate irritations, which discharges are due to exhaustion or defect of volume in superior inhibitory centres. Migraine is a malady of neurotic persons, and a neurotic person is one who inherits relative incapacity of one or many nerve centers. We are unable to say which center or system of centres is of defective volume in migraine, but seeing that signs of exhaustion are found in the head, speech organs, special senses, and if in the limbs generally on one side only, we may presume that the defective control is somewhat in one cerebral hemisphere. Most sufferers from migraine suffer on one side only, some on either side, but these have usually a "favorite side." In either the attacks are bilateral, vertical or occipital, or vary in position, often beginning in the occiput, passing over the vertex and finally settling in one temple and eye-ball. In one of my cases the attack begins just behind the left mastoid process in a limited spot like clavus; this is a hereditary case, and vomiting occurs. The treatment of migraine is not so blank a page as many writers would say that it is. Too often we are impotent to relieve a patient in his misery, but we may do much to postpone or diminish the seizures. In the epileptic fit we may do little; our hope lies in prevention. Still, even in the attack of migraine, we are not without resources. I shall not enlarge on the usual household expedients—on the quiet room, the easy posture, the feet in hot mustard and water, and so forth; but of drugs proper, two have seemed to me to be useful. In some cases guarana is as signally successful as it is helpless in others. In those it has often restored patients of mine to the duties and pleasure of life who were almost crushed by recurrent migraine. It answers best in the cases which begin with some slight warning in the early day. Guarana thus given in two or three doses at short intervals often cuts short an attack or wards it off altogether. Pure caffeine ought theoretically to have the same effect, but I have not carefully compared the two agents. The other drug is croton chloral, used in like repeated doses up to about 20 grains in all. In some cases migraine may begin at any hour and may begin suddenly; in others it continues 30, 40 or 50 hours, the patient meanwhile lying in a semi-conscious state of helpless misery. For such states we have no help. Ergot, nitro-glycerine, nitrine of amyl have not helped me much, but these drugs have able advocates nevertheless. Indeed as Burton says, "the manner of living is more to the purpose than whatsoever can be drawn from the most precious boxes of the apothecary." Looking upon migraine as I do, as a defect of development, and seeing it, as we all see it, as a disorder taking its origin in childhood, we must base our hopes of cure upon a healthful life, a healthful growth, and a healthful education. The principles of such a method of rearing neurotic children, and the terrible consequences of neglecting these measures, have been set forth with singular clearness and wisdom by Anstie, and I have not a word to add to his teaching.

Dr. Eustace Smith, an able and practical physician, finds that a combination of ergot and strychnia is of great value in addition to means of a more general kind. Dr. Ross also relies greatly upon ergot.

When we have to deal with fixed morbid habits of adult life, we can no longer hope to eradicate the tendency to migraine by promoting equable encephalic development; we have now to do with a finished machine, but yet with a machine not incapable of modification.

The great rule for the migrainous is an even life—a course of life which makes no rapid and no excessive demand upon nervous expenditure, and which favors steadiness of nervous action by an almost slavish adherence to routine. If an unwonted indulgence at table will cause a migraine, so will an unwonted abstinence from food. Sleep, work, food, must, both in quality, quantity and time, be regulated with such care that the nervous functions may be impressed with a like uniformity. In woman the catamenial period disturbs this serenity of conditions. Migraine has no essential connection with uterine changes, for a woman who has "catamenial migraine," as it is sometimes called, may inherit it from her father and transmit it to her son; indeed, such a transfer is in my experience very common. The catamenia only set up the migraine as any other oscillation may set it up—as a dyspepsia may do it, or an annoyance or an unusual effort. The migraine, indeed, bears no definite relation to the flow: in some patients it precedes the flow, in some it accompanies, and in some it follows it. Menorrhagia and leucorrhœa are, of course, common abettors of migraine, but by virtue only of their general tendency to bring about anæmia and exhaustion. When in respect of healthy home and climate, and a regular mode of life, we have put our patient under favorable circumstances, we must search in no routine spirit for any defect of nutrition or disorder or function which may exist. If we are satisfied that all these matters are cleared up and set in order, we may turn to specific remedies. In my hands a combination of bromides with quinine has, on the whole, and in a great number of cases, answered best. After this comes cannibas indica and ergot, and after these chloride of ammonium. Arsenic,

advertised by Watson, has answered well with me in some cases, but not, I think, better than Strychnia and such general remedies as the compound tonic syrups and so forth. One more important point remains. Piorry pointed out thirty years ago, that migraine was due to the strain upon some local defect in the eye, although he was necessarily then without more precise knowledge of these defects. That headaches—severe and recurrent headaches—are often to be traced to such defects is now well known, but Mr. Heweston, of Leeds, on a recent occasion produced several patients who had been cured of migraine properly so-called, by correction of astigmatism. Mr. Heweston's paper was a remarkable one, and his statements required the closest attention. Migraine however spares no rank and no age, and has in the past no fewer victims among the illiterate than among the learned. Dr. Liveing has suggested that even epilepsy itself may be excited by optic defects in persons so disposed; in any case the researches of the next few years will do much to enlighten us on these points and I trust to increase our power of relieving one of the most harassing of the minor ills of mankind.—*Medical Times and Gazette.*

INCONTINENCE OF URINE IN CHILDREN.

Dr. J. Lewis Smith read a paper on this subject (*Obstetric Gazette*), in which he mentioned eight causes, two of which might sometimes be present in the same case:

1. Too great acidity of the urine, causing undue contraction of the bladder.

2. Increased quantity of urine.

3. The presence of stone in the bladder, in which case the incontinence is both diurnal and nocturnal.

4. Abnormal contractile power of the muscular coat of the bladder. The importance of this cause is shown by the fact that belladonna, which controls muscular irritability, is useful in such a large number of cases of enuresis.

5. Weakness of the muscular fibres constituting the sphincter of the bladder. This is rare in children in good health, and Dr. Smith gave an account of one case in which it was associated with spina bifida.

6. Reflex action through the agency of the nerves supplying other organs in addition to the bladder. In this class are the cases due to structural disease of the spine, ascarides in the rectum, phimosis, preputial adhesions, etc.

7. The dreaming of the child that it is in a convenient place for urinating. To this psychical cause attention has been directed by Dr. Roberts Bartholow. That the enuresis is to a considerable extent under the control of the will is shown in cases where the habit has been broken up by the sending of the child among strangers or to a boarding school, where the sense of shame has constituted an influence sufficient for the purpose. Numerous instances are also on record where a flogging has permanently broken up the habit.

8. Malformation of the bladder or its appendages. Dr. Madden has reported the case of a young lady who suffered from a constant dribbling of urine, both by day and night, in which he found, on examination, that there was a malformation of the right ureter, which discharged the urine from the kidney on that side directly into the vulva instead of into the bladder.

In the treatment the great point was to discover the cause. If the affection seemed to depend on the character of the urine, this was to be rendered as bland and unirritating as possible, and Dr. Smith said that since he had recognized the acid character of the urine as a frequent cause of incontinence he had been able to treat very satisfactorily quite a large class of cases which had formerly proved troublesome. It was his practice to endeavor to render the urine as bland as tepid water. If there was acidity he gave from three to five drops of liquor potassæ, well diluted, three, four, five, or six times a day, until the urine became neutral in reaction, and then to continue the alkali in just sufficient quantities to maintain the neutral condition.

When there was increased functional activity the great reliance was to be placed on belladonna. The tincture was the preparation commonly used in this country, and of this five drops might be given every night and morning, the dose being increased by one drop each day until the desired effect was obtained or the physiological action of the drug had become apparent. When belladonna was found efficient it was to be kept up for some weeks in full doses, and the quantity then gradually diminished. This agent had been highly lauded by Trousseau, who used it in large doses. Dr. Smith related a case in his own practice in which a girl eleven years old, who suffered from both diurnal and nocturnal enuresis, and who had previously taken belladonna and other remedies, was cured. The urine was highly acid, and the treatment which he prescribed was five drops of liquor potassæ three times a day (or more, if this was necessary to keep the urine neutral in reaction) and tincture of belladonna in nine-drop-doses, the quantity gradually to be increased to fourteen or fifteen drops.

If the enuresis were simply due to the large quantity of urine secreted, the liquid food was to be restricted, especially toward evening, and if diabetes were present, of course the treatment appropriate to that disease was to be adopted. In diabetes insipidus ergot was found to be of great service. Suspicion of the presence of a stone in the bladder would be excited by painful micturition, increased quantity of mucus in the urine, and sudden stoppage of the full stream. The use of the sound would confirm the diagnosis, and the stone could then readily be crushed. In every case of incontinence it was important to make a careful examination of the parts contiguous

to the bladder, such as the rectum and the genital organs, for the existence of ascarides, phimosis, preputial adhesions, hardened smegma, etc. If the enuresis were due to paresis of the sphincter, a treatment very different from that of belladona was required, and here ergot, either alone or in connection with nux vomica or strychnia, was found very useful in restoring the impaired innervation and stimulating muscular contractility.

A considerable number of remedies which were formerly employed to a large extent for incontinence of urine were now seldom used, but some of them were still deserving of confidence in certain special cases. Among these was strychnia. In children under four years of age there was some danger in giving it, and it was better to employ nux vomica under the circumstances, but above that age it was perfectly safe to use it. Tincture of cantharides, although, as a rule, an unpleasant remedy, could sometimes be employed with advantage if given in small doses. Cubeb and vegetable tonics and astringents were also sometimes called for.

Dr. Smith referred to the use of baths, and douches, and to the suggestion of Trousseau, that the patient should be required to urinate as frequently as possible during the daytime.

Dr. J. W. S. Gouley said the most frequent causes of the enuresis were lithuria and polyuria, the latter being often met with in nervous children. Children, after they became two or three years old, did not wet their clothing in the daytime, but only at night. In some instances such children retained the habit until they were grown, and he had seen men twenty-five, thirty and forty years of age who were still subject to it. No amount of whipping could cure a child of wetting the bed on the contrary, corporal punnishment could do harm and only make the condition worse. Lithuria was much more common in young subjects than was generally supposed. When this was present there was not an accumulation of urine, but a constant enuresis, both diurnal as well as nocturnal. He believed that there should be both general and local treatment. He thought, however, that it was a mistake to attempt to make the nrine as "bland as tepid water," as Dr. Smith spoke of doing. This would only increase the enuresis, as very bland urine, like pure water itself, was known to be irritating to the bladder. But in connection with the internal administration of iron, more particularly the old-fashioned tincture of muriate of iron, he had often afforded great relief by the imtroduction of the sound or catheter every two or three days. As a rule, the steel sound, if skillfully used, was preferable to the gum catheter. In both girls and boys (although the number of the former he had seen suffering from enuresis was quite small) he had observed excellent results from his practice.

Dr. Smith said, in regard to chloral, that he had not tried it in this connection, but it seemed to him that if it was given in nocturnal enuresis it would only tend to aggravate the trouble by inducing more profound sleep.

ACUTE PERITONITIS TREATED BY ABDOMINAL SECTION.

Mr. Frederick Treves thus writes in the *Med. Press*, May 6, 1885: A female, æt. 21, was admitted into the London Hospital on January 21st, 1885, suffering from chronic pelvic peritonitis following severe gonorrhœa. On February 25th, two months after the commencement of the chronic peritonitis, she suddenly developed the symptoms of acute diffused peritoneal inflammation. The sequel showed that a large chronic purulent collection, containing very offensive matter, had formed near the left pelvic brim. The walls of the abscess were formed partly by the pelvic peritoneum and partly by many coils of small intestine that had become matted together. The acute symptoms were due to the bursting of this abscess and the extravasation of its contents into the general peritoneal cavity. On February 26th the abdomen was opened under antiseptic precautions, the patient being at the time apparently in a very critical condition. The general surface of the peritoneum showed the ordinary appearances of acute peritonitis. The intestines, where in contact, were lightly glued together. A quantity of semi-opaque fluid mixed with flakes of lymph and pus escaped. The whole peritoneal cavity was washed out with many quarts of water and a drain introduced. The patient made a good recovery, and was allowed in the garden on the fortieth day.

Remarks.—The extreme fatality of acute diffused peritonitis—especially of that form due to perforation—and the acknowledged futility of the modes of treatment that are at present employed, give some support to the proposal that acute peritoneal inflammations should be treated by the same methods that are successfully applied to other acute inflammations, viz., by free incision and drainage.

This common and general surgical procedure has been already applied for the relief of the inflammations of certain of the serous membranes. It was at first adopted in connection with the smaller serous cavities, as those of the joints. It has been gradually and with increasing freedom applied in the treatment of inflammatory conditions involving the pleura. It has finally become a recognized means of treatment in certain forms of localized and chronic peritonitis, especially when purulent collections have formed. The author would urge the adoption of this principle in treatment in connection with acute and diffused forms of peritonitis.

TANNIN AS A SPECIFIC FOR CARBUNCLE.

Tannin is claimed to be a specific for carbuncle. The dry powder should be sprinkled on as long as it will dissolve. Every day the carbuncle should be washed and re-sprinkled with tannin. It is said that under this treatment the carbuncle soon heals, and without much pain.—*Cour. Rec.*

MEDICINES WHICH STIMULATE THE LIVER.

Podophyllin in small doses, is a stimulant of the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Euonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic stimulant. It also stimulates the intestine, but not nearly so powerfully as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerfully as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic as well as intestinal stimulant.

Menispermin does not stimulate the liver. It slightly irritates the intestinal glands.

Babtisin is a hepatic, and also an intestinal stimulant of considerable power.

Phytolacin is a hepatic stimulant of considerable power. It also slightly stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonium is credited with cholagogue properties, but it is questionable; nevertheless it certainly stimulates the intestinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still *sub judice.*

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potssh is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxacum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrite of potash, and hard soap have each some stimulant action on the liver.

THE TREATMENT OF EPISTAXIS.

Introduce into the nostril, to a considerable distance upward, a piece of fine sponge, cut to the size and shape necessary to enable it to enter without difficulty, previously soaked in lemon juice or vinegar and water. The patient is to be kept lying on the face for a length of time, with the sponge in place. This, says *Lyon Medical*, is the procedure employed by M. Siredey for controlling epistaxis in typhoid fever patients.—*N. Y. Medical Journal.*

HOW TO SHRINK HYPERTROPHIED TONSILS BY CAUSTIC APPLICATIONS.

Among various caustics for local use in causing shrinkage of tonsillar hypertrophies, Dr. Chisholm (*Virginia Medical Monthly*) has found the chloride of zinc the most available and the least annoying to the patient. He employs it in the following manner: A wire the size of a fine knitting needle, is roughened for a half inch from one end so that it may hold a fibre of absorbent cotton twisted upon it. Dip this into a saturated solution of chloride of zinc and thrust it to the very bottom of the crypt, and keep it there for several seconds. When withdrawn the whitened orifice marks the cauterization. By renewing the cotton for each follicle several may be thoroughly cauterized at the same sitting without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after the destructive cauterization has been made to the interior of the follicles.—*Medical Record.*

CARBOLIC ACID IN INDIGESTION.

Berdoe has frequently treated acid dyspepsia with small doses of carbolic acid. He uses a solution suggested by Dr. Fenwick, containing one part of the crystalized acid in four parts of glycerin, and gives from five to ten minims as a dose, either merely diluted or mixed with nux vomica or liquor opii sedativus, the latter being added in case of pain. He does not attempt to explain the action of the drug, but suggests that its efficacy may be due either to its anti-fermentative power or to the anæsthesia which it induces in the gastric mucous membrane.—*N.Y. Medical Journal.*

IODIDE OF POTASSIUM IN INFLAMED BREAST.

Dr. Samuel Welch thus writes in the *Med. Press*, April 22d: Having been frequently disappointed with the ordinary remedies in the highly troublesome condition arising from the presence of milk in the breast after the death of the child, or in cases of still-born children, and having found that the effects of belladonna are often uncertain, and that purgatives, although certainly useful, are frequently unreliable, I determined to try the effect of iodide of potassium applied locally in the form of an ointment, and I have met with great success from its use in this manner.

The system I pursue is the following: I have the breast suspended in a sling to prevent all dragging, and pressure exerted on it by means of folded napkins. I then order a free inunction of the iodide of potassium ointment three times a day, administering purgatives internally. For the first two or three days, should it be necessary, I have the milk drawn off once daily by the nurse, and find almost invariably that after a few days all troublesome symptoms pass away. and any anxiety on the score of the milk is removed.

PRURITUS OF WOMEN.

LOCAL TREATMENT.—All acquainted with the incessant suffering which some women undergo from pruritus at the period of the menopause, must be very desirous of being made acquainted with a prompt remedy for so distressing an affection. Whether it arise from the presence of prurigo, urticaria, eczema, herpes or whether it exists without any eruption at all, it is alike difficult to allay, as the great number of remedies which have been proposed testifies. Of these veratria is by far the most efficacious. When the pruritus is localised at the groins, arm-pits, walls of the abdomen, or behind the ears, gentle friction night and morning with an ointment, consisting of thirty parts of lard and a quarter of a part of veratria, usually gives relief. When the pruritus is generalised, the internal administration of the veratria is preferable. Two centigrammes should be made into ten pills with liquorice powder, of which from two to six should be taken daily, either half an hour before, or three hours after meals. Only one should be taken at a time, an additional one being given each successive day until the maximum of six (three milligrammes) is attained.—*Dr. Chêvon, in Le Progrès Medical.—Med. Times.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, NOVEMBER, 1885.

The *Canadian Pharmaceutical Journal* for November says the following decision was recently given by Hon. Justice Johnson in the case of the College of Physicians and Surgeons of Quebec, *vs.* Theobald Chive. The action was brought in the Circuit Court for $50 penalty under the Stat. 42 and 43 V., c. 37 and amendments, for practising medicine without being a registered licensee (10th April, 1883). "Two instances are specified: First, one Ad. Martel, whom he treated, and received thirty cents; second, Jos. Archambault, whom he treated, and got eighty cents (20th March, 1884). He pleads that he never practised medicine contrary to the Statute, but that he is a licensed chemist and druggist, and has a right to sell and recommend his drugs and wares, and that he did no more. Secondly, he pleads prescription. The plaintiff, in his declaration, alleges that the reason he did not bring the action before was the absence of the defendant from the province. There is no evidence of practising medicine or prescribing it in the sense of the statute. In the first case, the man Martel was suffering pain from inflammation of the bladder, and told the defendant so, and the latter recommended a lotion or liquid in a bottle for which he charged thirty cents. This would seem a small fee for a prescription by a physician, and was evidently only the price of the physic or stuff that he used and had a right to sell. In the second case, the witness says he was weak and wanted a tonic, and got two bottles for which he was charged and paid forty cents each. It would be straining the law to apply it to such a state of facts as this. The defendant is proved to be a licensed druggist, and he had a right to recommend his wares, and receive the price of them, which is all he did. I see nothing about prescription or limitation of action in the statute, and nothing was cited, but that is unimportant under the evidence.

No. 3,466. This is another case against the same man for another and different offence, under two sub-sections of sec. 88, *i. e.*, for illegally assuming the title of doctor, physician, or surgeon, or any other name implying that he is legally authorized to practice medicine or surgery, etc., or for assuming in an advertisement, a written or printed circular, or on business cards or signs, a title, name or designation of such a nature as to lead the public to suppose or believe that he is a registered or qualified practitioner of medicine, etc. There is a demurrer pleaded to this action; but I think the allegations are sufficient. They say that the defendant held himself out as a practising physician by printed labels on bottles of medicine which he sold, but using the words *Dr. Chive* on them. But there is besides a specific allegation that he has assumed a designation of a nature to cause it to be supposed that he is practising as a physician. Therefore, if he has by these labels

or otherwise assumed that designation *to himself*, so as to have the effect alleged, it is sufficient. The plea to the merits is the same as in the other case. There are two labels on which the words "*Dr. Chive*" appears: one on a bottle of "*extract of tobenambour for flavoring ice cream, custards, etc.* The other is said to have been removed from a bottle, and reads "Pharmacie normale. *Elixir bechique pulmonaire du Dr. Chive ex interne des hopitaux de Rouen* remede souverain pour la guerison des toux, etc., etc." The questions are: did the defendant assume a designation for himself, or were the printed labels of a nature to cause it to be supposed that he was a practising physician here? It could not be doubted, I think, that this man who pleads and proves that he is a licensed druggist has a right to sell flavoring extracts, or cough remedies. The only possible doubt would be whether in selling and labelling them in this manner he meant to pass himself off as a licensed doctor here. The words "Dr. Chive" are there on the two bottles. Do they refer to himself or to another Dr. Chive of Rouen? or, if they refer to himself, cannot he say lawfully that he was once Dr. Chive of Rouen, and I have no doubt of the fact from the certificate of the mayor of Candelier, which is produced, and that he sells under his druggist's license here the things he learned to make there? There are three other bottles also produced. They neither of them have the words "Dr. Chive" on them: but "dir. Chive"-which is said to signify that he is, and wants to be known as *directeur* of this "Pharmacie Normale" which he keeps, and has a right, under his license, to keep. It may be, perhaps, a device or trick—and that is what is contended for by the prosecution; but there are two reasons why I do not act upon that view of the case. First, in a penal action, I want clear proof; second, the principal witness, in the case, and indeed, admittedly, the instigator of it, is Dr. Thayer, who says he bought out this man's business a couple of years ago on condition he was not to return and resume it, but that he has returned and resumed the business, and is now being sued by the same person for $10,000 damages. That is not evidence of a kind that I can implicitly rely upon to convict of an offence against this statute, where the intent of the party is to be made apparent, an intent which is to be shown, not so much by direct proof as by the inference and reasoning of the witness. I think there is a fair doubt whether the defendant meant to pass himself off as a doctor, or merely to vend under his druggist's license, things that were made by another, or even by himself in another country where he could truly call himself a doctor. Upon the whole case—and considering the whole extent of the evidence, I think that the defendant cannot fairly be held to have assumed to practice as a doctor here, because he said on his labels that when he was in France he had been a doctor there, and made stuffs which he sells here under his license as a druggist.

Both actions were dismissed with costs."

LOCAL AND GENERAL.

Dr. Santvoord lately read a paper on "Obscure Cases of Weak Heart" before the New York Academy of Medicine—a paper that will amply repay perusal. I am sure it must occur to most of us that there are many cases of continued dyspnœa vertigo and headache, and combinations of these symptoms which point to cardiac trouble, and yet which cannot be referred to distinct valvular or other lesions of the organ. Dr. Santvoord in the treatment frequently used digitalis and nux vomica or strychnia with admirable results.

In these cases of weak first or second sounds, weakened cardiac impulse and reduplication of first or second sounds, caffeine often does good where digitalis is found to be inefficient.

The reader inclined to the belief that in acute diseases where there is cardiac weakness caffeine is to be preferred to digitalis. He thought Bramwell's explanation of the phenomena of reduplication, viz: that it is due to a synchronous action of the ventricles, to be the true one.

In the discussion that followed this paper it was pointed out that tobacco, digestive troubles, and faulty metamorphoses were very frequently the causes of weakened heart.

Some years ago Dr. Young of Hong Kong published in this journal a very interesting account of the condition of native medicine in China. Quite recently there has been published by the Methodist Episcopal missionaries, under whose control the institution is, the second annual report of the Soochav Hospital and Soochow Medical School.

The School has eleven native students, and the course laid down is very complete comprising a five years' curriculum, nine months session, and a thorough preliminary examination in Chinese Classics.

The lectures are in the native language. The students now have an amply supply of Chinese text books.

The Railway Age has an account of a certain physician out West who tried "to sell an abscess on the posterior part of his anatomy to a railway company for $10,000." The doctor, it seems, was going by train to Indianapolis for the purpose of attending a Democratic meeting there. The cars were full, and he was obliged to seek refuge in the baggage car and sat down, not only upon an egg-crate, but also upon a nail which protruded from the said crate, and entered, penetrated, and pierced that portion of the doctor's body which must necessarily come into use if one sits down at all. It further appears that the railway company had negligently omitted to scour this nail with brick or sand-paper, and had permitted it to become rusty. The result of the puncture, it is alleged, was an abscess, which caused the doctor great trouble, and even endangered his life. As a plaster to this wound, he now asks the railway company to pay him $10,000, and has called upon the court to enforce his request. The case is full of fine points —fuller of them than the egg-crate. Did the company invite and request the physician to enter the baggage-car and sit down on the egg-crate? Is it the duty of the company to polish up the nails in the egg-crates which it carries? Should not the doctor have looked out for nails before he sat down? Was the sore really an abscess, or only an old-fashioned boil? Was the doctor's blood in good order when he sat down on the nail, or did he inflame it unnecessarily by getting mad, and prancing around in warm weather, when he discovered that the nail had gone where it ought not? Can a man's blood be in good order in the midst of a "heated" Presidential campaign, and when he is on his way to a big political meeting? Might not the doctor in his enthusiasm have taken that method of nailing his colors to the mast, and only became sorry for it when inflammation ensued? Altogether the case embraces many very interesting medico-legal questions, and will, no doubt, result in settling many points hitherto undecided. It is a case of which it may truly be said that there is a point in it."

The exact value of the salicyl compounds in the treatment of rheumatism and rheumatic diseases is pretty well indicated in papers by Dr. J. S. Bristowe (British *Medical Journal*, August 22nd) and Prof. T. R. Fraser (Edinburgh *Medical Journal* July, August and September, 1885) and by discussion of the former paper by Drs. Latham of Cambridge, Dr. Pavy, Dr. Sidney Coupland and other well-known physicians. It is generally conceded that the anti-rheumatic action of the compound of salicin is to be classed with quinine in ague, and of iodine and mercury in syphilis. When twenty-grain doses of sodic salicylate or salicine are administered every two hours the temperature usually becomes normal in a day or two, and remains so if the treatment is continued.

Both Prof. Fraser and Dr. Bristowe point out that salicyl compounds fail in several important instances, viz: where there are complications of important viscera, persistent inflammation of a single joint, chronic rheumatism, gonorrhœal rheumatism and in rheumatic gout. Fraser also claims that these compounds are equally good in ordinary acute polyarthritis, in the variety that is associated with chorea and scarlatina, in acute muscularrheumatism rheumatic schleratitis and iritis, and in acute gout. Most Canadian practitioners can testify to their value in lumbago when it appears as a true acute muscular rheumatism.

This is how the Editor of the New York *Times* made himself merry over an article on microbes. After describing the prevalence of these minute forms of life, he says: It is very evident that all must make persistent effort to reduce the number of microscopic animals to at least the extent to which their predecessors reduced the number of wild beasts. Every man must become the protector of his own household. The cautious man will hereafter never venture to open his door without sweeping the front yard with his microscope, to see if the foe is at hand; and no one will venture out of doors without a gun loaded with carbolic acid, and without a microscope worn like a pair of spectacles, ready for instant service. Man will probably have to abandon his present house, as it affords little or no protection against the fierce bacillus; and he will be compelled to live in glass houses surrounded by ditches filled with carbolic acid, and provided with ventilators so contrived as to forbid the passage of the enemy. Governments will doubtless offer rewards for the capture or killing of microbes; and bands of scien-

tific policemen, equipped with powerful breech-loading microscopes, will ceaselessly hunt down the foe.

At last the Montreal Board of Health have decided to enforce the law regarding compulsory vaccination. In the meantime the variola fire has burned low for want of fuel, there being only eleven deaths from the disease on one day of last week.

It has been decided to serve a copy of the *Official Gazette* containing the law on the subject upon everyone who refuses or who has refused to permit hinself to be vaccinated. Whether the matter will be further pressed or not remains to be seen.

At least one Municipality refuses to take any precautions or to adopt any effective method of repressing the disease. There is no placarding, no attempt at isolation, no public vaccination—only a stupid, apathetic, and ignorant trust in *le bon Dieu* who sent the scourge. It looks as if the disease will die out there only when every unprotected person has taken it. Why not bring matters to a crisis? If every one there *must* have small-pox why not have a grand mass-meeting for the purpose of contracting it—so get the agony over at once.

Unless the Central Board are determined to enforce vaccination in the locality referred to this appears to me to be the most logical procedure that can be devised.

P. A. LAVER, M.D.

MONTREAL, Nov. 24, 1885.

MRS. SOUTHWORTH'S FAMOUS BOOKS.

Messrs. T. B. Peterson & Brothers, Philadelphia, Pa., have just made a large reduction in the retail price of all their popular duodecimo publications, including the well known and popular books written by Mrs. Emma D. E. N. Southworth, Mrs. Ann S. Stephens, Mrs. Caroline Lee Hentz, Mrs. Catherine A. Warfield, Miss Eliza A. Dupuy, Alexander Dumas, and their several well-known and standard Cook Books by Miss Leslie, Mrs. Hale and others. These popular books will be found for sale by all booksellers, and they will now get a fresh impetus by the large reduction made in their retail price. The Messrs. Peterson will send their new Catalogue to any address, if written for, with the new and reduced retail prices annexed, and all Booksellers are requested to write for special wholesale rates, as Peterson's books always meet with large sales wherever shown and properly introduced, and they give large discounts and easy terms to the trade.

PETERSON'S 25 CENT SERIES.

T. B. Peterson & Brothers, Philadelphia, Pa., are now publising a Series of Novels at 25 cents each, which, for contents and neatness, have never been equalled, with hardly a dull line, and once taken up the reader will be loath to lay them down, mostly charming love stories. The capital novel of "Two Kisses," by Captain Hawley Smart, was No. 1. "Mam'zelle Eugenie," by the captivating French writer, Henry Greville, was No. 2. To be quickly followed by such first-class stories as "Worth The Wooing," by Lady Gladys Hamilton, "Her Second Love," "Saveli's Expiation," by Henry Greville, "Bertha's Baby," "Sylvie's Betrothed," "Just One Day," by John Habberton author of "Helen's Babies." "That Girl of Mine," "Matchmaker," "That Lover of Mine," "Handsome Miss Lisle," by Lady Gladys Hamilton, etc. These books will be found for sale by all first-class Booksellers generally, and on all Railroad News Trains and Stands, or copies will be sent to any address, on receipt of 25 cents each, or five for one Dollar, by the Publishers, T. B. Peterson & Brothers, Philadelphia, Pa.

THE SMALLPOX EPIDEMIC.

We are sure all our readers will be glad to learn that the death-rate from smallpox in Montreal is rapidly decreasing. There is every appearance that, by the end of the year, the disease will probably have disappeared. We regret to hear, however, that it continues to spread throughout the Province.

PERSONAL.

Dr. Shaw (M.D. McGill, 1882,) has commenced practice in St. Johns, Que.

Dr. Robert Howard of St. Johns, Que., has been confined to bed for the past two months, suffering from a form of spinal disease. His condition is considered very critical. We are sure his many friends will hear of this with great regret.

Dr. Rowell (M.D., McGill College, 1884) has commenced practice in Montreal. At present he is lecturing on anatomy at Bishop's College for Dr. Gardner, the professor of that branch, whose whole time is occupied with his duties as physician to

the Protestant portion of the Smallpox Hospital. We hear that Dr. Rowell is a great favorite with the students and a first class lecturer.

Dr. Codd, of Winnipeg, has, we believe, been appointed Surgeon to the Mounted Infantry corps (regulars), which is being embodied in that city.

Dr. McNeece, (M.D. McGill) has resigned his appointment as assistant health officer in Montreal.

CORRESPONDENCE.

The following extracts from a letter written from the London Hospital to one of the Editors of this Journal may prove of interest to our readers:—Yesterday I saw a child with hydrophobia. "Oh, God, that I could paint a dying groan," then might I paint the unearthly expression of that infant's face when but the word "water" was pronounced. what a prolific ground for painters a hospital would be! But why should *we* seek the shadow when we have the substance before us? It is very useless for me to begin to write to you of London on less than ten sheets of foolscap, so I will drop the tempting subject and go to the hospitals for a moment. Sir Andrew Clark you know: he is a great man, but he is also among great men, and he fails to convince his associates that he has established his peculiar views on *Fibroid Phthisis*. I believe, however, that there have not as yet been found any bacilli in any case which he has called *Fibroid Phthisis*, and that will go a good way towards proving the non-identity of the different forms of *Phthisis*. Sir Andrew does not think, however, that bacilli are the cause of tubercle, but he is willing to say that where tubercle is there also are bacilli, and *vice versa*. As far as my experience goes I am of the opinion that the bacilli are not discoverable in the sputum until after a period when physical signs have made the diagnosis clear. In fact it is rare to find bacilli prior to a period when elastic tissue may be found in sputa, an absolute test of the existence of a cavity and usually of a tubercular cavity. Sir Andrew is an excellent ward teacher. He speaks in a clear voice, and is thoroughly systematic and practical. The name of Hughlings-Jackson is almost a household word in England. His acuteness in the diagnosis of nervous diseases has made him the greatest authority in England on that particular branch. His theory that chorea and epilepsy are caused by multiple emboli in the small vessels of the cortex and other gray matter of the brain is not considered proven, inasmuch as they fail to find such emboli *post mortem*, except in a very limited number of cases. The theory has this in its favor, however: *every* case of death at least of chorea has, *post mortem*, shown vegetations on the valves of the heart and in *half* of the cases endocardial murmurs have been made out before death. On the other hand, again, it is noticed that in nearly every case of *slow* death, the autopsy shows vegetations on valves, whether caused by chorea or not. However, his theories turn out, when he gives you a thing as a fact you need seek no better proof. He is one of the most careful men I ever knew, and for his great reliability, if for that alone, he is of priceless value as a clinician. Dr. Sutton who is not so well known as his colleague, Sir William Gull, is a great thinker and worker. He knows neither law nor rule in treatment of diseases. He is showing to the world by statistics that more of his cases get well without drugs than with them. You will smile when I tell you that I have seen him prescribe whiskey alone, in a case of acute articular rheumatism. I have known him as the sum total of the treatment to advise a patent with lobar pneumonia to sit up an hour a day and indulge in plenty of good, cheerful conversation! Whilst he is one of the most successful of physicians he is the rock on which many a student founders when he comes up for his final examination.

Of the surgeons at the London Hospital, Mr. Treese is the most popular teacher. He always prepares his case thoroughly, and gives it to you fully, yet concisely and to the point. He has a host of followers in the wards, and a large audience in the ampitheater. Mr. Bryant of Guys is known to every one by his excellent work on surgery. Not only is he authority on surgery but he is a born teacher. His voice is clear and musical, and not a word need escape the listeners. Mr. Bryant says, however, that he cannot keep his wounds sweet with corrosive sublimate solution, and uses a solution of iodine instead. The carbolic spray is still used in most of the London hospitals, but other matters of detail in antiseptic surgery are not so well carried out as in New York. The extreme politeness and cordiality received from the men whom I have met here is very pleasing to one. As I accepted a short season of work at the London hospital, I have not seen much outside, but may write you again in future.

"W. P. S."

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, DECEMBER, 1885. No. 3.

BOSTON MED. LIBRARY MAY 6 1886

CONTENTS.

ORIGINAL COMMUNICATIONS.

The A. C. E. Mixture .. 337

PROGRESS OF SCIENCE.

A Year's Experience in Tracheotomy 342
Buttermilk in Sick Stomach 343
The Treatment of Tapeworm 343
Treatment of Chronic Ulcers of the Leg . 345
Simulo in Epilepsy 345
Bichloride of Mercury in Diphtheria and Croup 346
Ice to the Spine in Obstinate Vomiting .. 346
Desquamation in Scarlet Fever 346
Hazeline in Menorrhagia 346
The Treatment of Chronic Bright's Disease 347
Gonorrhœa Easily Cured 348
Turpentine in Skin Diseases 349
Opium in Hœmoptysis 349
Treatment of Angina Pectoris by the Iodide of Sodium 349
The Treatment of Corpulence on Physiological Principles 350
Glycerine in Gastric Disturbances 350
The Therapeutic Value of Arsenic in Anæmia and Atrophic Conditions 351
Belladonna Injection for Gonorrhœa 351
Boroglyceride in Psoriasis 351
Iodoform Collodion in Neuralgia 352
The Surgical Treatment of Gall Stones . 352
Useful Inhalant 352
The Use of Carbonate of Ammonia in Cerebral Hemorrhage, Thrombosis and Embolism 353
Membranous Croup, Diphtheritic Croup, True Croup 353
The Rectum 354
Prescription for Alopecia 354
How to Diagnose Gonorrhœa in the Female 355
Instructions concerning the Management of Diphtheria 355
Report of a Case of Naso-Pharyngeal Catarrh 355
Incontinence of Urine in Children 356
Pilocarpine in Croup 356
The Contagious Skin Diseases 357
Nitro-Glycerine, Nitrite of Amyl and Nitrite of Sodium in Cardiac and Renal Diseases 357
The Treatment of Sick Headache 358
Treatment of Eczema 358

EDITORIAL.

The late Dr. Marsden, Quebec 358
Local and General 359
Reviews 360

Original Communications.

THE A. C. E. MIXTURE.

THE BEST ANÆSTHETIC IN OBSTETRICAL PRACTICE.

Read before the Montreal Medico-Chirurgical Society, December 18th, 1885, by A. LAPTHORN SMITH, B.A., M.D., M.R.C.S. Eng., Professor of Medical Jurisprudence, Medical Faculty, Bishop's College.

In case that some apology for reading a paper on this subject might be considered necessary, let me just for a moment recall the different anæsthetics at present in use, and see if any one of them fulfils all the requirements of the profession, either in general surgery, or more especially in midwifery practice.

The requirements for the best anæsthetic are:

1st. Absolute safety.

2nd. Capacity for producing anæsthesia, either complete or incomplete, according to the requirements of the case, and for a long or short period of time.

3rd. That the patient should go under it quickly and quietly, and come out of it rapidly.

4th. That it should cause little or no unpleasant after-effects.

I think we will all agree that none of the more generally-employed anæsthetics possesses all these advantages.

Nitrous oxide gas requires a cumbersome apparatus in which to carry it about, and as its effects are obtained principally by suffocating the patient, as evidenced by the blackness of the blood, it can only be safely administered during a period of time, so short as to suffice only for such trivial operations as extracting teeth and opening abscesses, etc. For such it is perhaps the very best possible, but, outside of the dentist's office, it is almost a complete failure, while even there it does not hold undisputed sway, when ever, by reason of the number of teeth or difficulty of extraction, more than a few seconds are required to complete the work.

The great objection to chloroform is the lack of the first requirement, absolute safety. Now, when I speak of absolute safety, I do not mean to credit this delinquent with all the deaths that are put down to its charge. It is manifestly unfair to put down to the anæsthetic the ordinary chances and hazards of life, and, still less, when the chances of death are considerably augmented by the unusual condition in which the nervous system almost always is just before an operation—to say nothing of the shock produced by the nature of the operation itself. To illustrate my meaning, I may recal two incidents, one related by Gross, that of a man who was to have a small sebaceous cyst removed from the scalp, and who, just before the operation, decided that he would not take an anæsthetic. The surgeon had scarcely touched him with the knife when he suddenly ceased to live. Now if the patient had even drawn a single breath of anæsthetic his death would most surely have been charged to its account. The other case narrated by Mr. Holmes was that of an old man with extensive disease of the heart. He was placed under chloroform, and the operation completed without any bad symptoms. A few days later he fell down dead while walking across the ward. If the ordinary chances of life, consistent with such

an organic disease, had brought his earthly career to a close on the operating table, his death would most unjustly have been put down to the anæsthetic.

But, apart from such cases as these, there are undoubtedly others in which death can fairly be attributed to the previous action of the drug upon the nerve centres of the medulla presiding over circulation and respiration, and in some cases upon the nervous ganglia in the heart itself, and, unfortunately, of these cases chloroform can claim the lion's share. The death rate at present is, I believe, 1 in 1600—good cause for anxiety to the man who has the responsible duty of administering it.

In spite of the advantages it possesses of rapidity of action and facility of administration, the lack of the qualification of safety is so great a drawback that it has been almost banished from American surgery, in the United States at least, where ether, in spite of the immense quantity of the drug required for an ordinary operation, in spite of its inflammability, in spite of its disagreeable odor both to the patient and to all the occupants of the operating room, and in spite of the unpleasant and long continuing after-effects,—to say nothing of the very great length of time it sometimes takes to get the patient under its influence, still holds almost undisputed sway in the opinion of most operators on this continent. It is true that some of the disadvantages are either gotten over or alleged to be removed by employing one or other of the inhalers, such as Snow's for chloroform and Clover's for ether. But Mr. Lister has shown that when chloroform is administered on a towel the air inhaled never contains more than 4·5 per cent of the anæsthetic; while in the case of ether inhalers, such as Clover's, there are valves which are liable to get out of order; and as the same air may thus be breathed over and over again, the patient is exposed to the risk of suffocation. The objection to ether that it is so inflammable is a trivial one comparatively, in surgical operations, where the surgeon can generally chose midday for operating; but it becomes a serious one in midwifery where the physician's services are required more often at night, and where the evaporating of a pound of such an inflammable substance in a closed room with a lighted lamp becomes a very temerarious proceeding.

The very fact that so many rivals to these three principal anæsthetics have sprung up and been tried in the balance, and found wanting, and that, with all their faults, ether and chloroform alone survive, shows that so far we have not yet in general use either an anæsthetic or a combination of anæsthetics which can meet all our requirements. That the profession has such a substance within its reach I believe I can show, and it is to advance the claims of this combination that I have undertaken the task of preparing this very imperfect paper.

Some six or seven years ago I drew the attention of this society to a combination of anæsthetics which I had first seen mentioned in a work by Dr. Harley on the diseases of the urinary organs published about 1874.

A mixture which was composed of alcohol, chloroform and ether, in proportions of 1, 2 and 3 of each, respectively, was highly recommended by the author for use in cases of uræmia where it was necessary or desirable to keep the patient anæsthetized for a considerable length of time, sometimes for as much as two or three days. As it would be dangerous to keep a patient under the influence of chloroform for so long a period, and as it would require an enormous quantity of ether for such a purpose, Dr. Harley conceived the idea of combining these two anæsthetics, and adding sufficient alcohol to counteract the depressing effect of the chloroform.

Of late years since the much more frequent use of the forceps, and a more highly cultivated sense of humanity, have led to the more general use of pain-destroying agents in midwifery, and as such cases frequently require such agencies for a considerable length of time, I have thought that such a combination would find an especially suitable place in the now somewhat ample bag of the obstetrician. Since then I have had the experience of over 100 cases with this anæsthetic combination, both in obstetric and in general practice, and now feel quite justified in giving it the highest recommendation as the best anæsthetic we can use. The greatest claim it has upon our favor is, I think, its almost absolute safety, and as we are frequently called upon to perform minor operations which we are anxious to do without causing pain, and while the importance of the operation does not warrant us in calling in another doctor, it is of no slight importance that the anæsthetic, the administration of which we must thus intrust to a layman, should be comparatively devoid of danger.

By using this one we can be sufficiently free from anxiety to be able to devote almost all our attention to the operation, while in using chloroform, one is hardly justified in performing even the slightest operation without assistance. But if it has any advantage on this score in general practice, it has it to a far greater degree in the practice of midwifery, for there we have often to deal with a nervous, albeit, exhausted and excitable patient, to whom the administration of chloroform is a proceeding requiring almost undivided attention on account of the danger, while the administration of ether so much increases the excitement that it would take a very smart man indeed to administer the vapor and to handle the instruments at the same time, but by using the A. C. E. mixture one can intrust it with safety to the nurse, or, as I often do, to the patient herself. In any very tedious case I hand the patient the bottle of it arranged with a sprinkler, such as is found on scent bottles, and allow her to use it as often as she likes.

The records of fatal cases of chloroformisation show that many of them occur in the dentist's chair. This has been explained by the fact that chloroform diminishes the amount of blood circulating in the brain, and that the erect position still further augments the cerebral anæmia, so that in these cases death is as much due to fainting as to the destructive action of the chloroform on the nerve cells of the medulla. For this reason ether is undoubtedly a much safer anæsthetic for dental surgery. But, on the other hand, it frequently takes so long to get the patient anæsthetized, during which time two skilled professional men are kept waiting, and, moreover, the period of excitement is so distasteful to the friends who generally accompany the patient, to say nothing of the large quantity of material required, that the administration of ether to a point of complete insensibility is both tedious and disagreeable.

For these cases, however, I have found the A. E. C. mixture especially suitable.

Many of the dentists in whose offices I have used it, testify enthusiastically to the rapidity with which the patient becomes unconscious, to the perfect quietness, absolutely free from excitement, with which they go under its influence, and to the very short time they require to completely recover. Of course this immunity from danger and absence of the period of excitation are due, the former to the presence of alcohol, and the latter to the presence of chloroform, in the mixture. It has long been the custom in many of the London hospitals to administer a dose of alcohol to the patient about to undergo chloroformisation, but is it not better and more effectual to administer the antidote with the poison rather than before or after it?

Another very important advantage is the almost total absence of vomiting.

Out of the one hundred and some odd occasions on which I have administered it I have never seen the A. C. E. mixture produce vomiting, although occasionally I have known it to cause nausea for a time, but not to anything like the same extent as that produced by ether or chloroform alone, So tedious used Mr. Clover, a few years ago, to find the use of ether alone, in producing anæsthesia, that he was in the habit of using laughing gas first, and continuing with ether only after the patient had become unconscious. But this is altogether out of the question in daily practice, where many a doctor has to be his own chloroformist. While in these cases in which he used chloroform, so fearful was Mr. Clover of its dangers that he nearly always took care to have it accurately mixed in proportion of half a drachm in a thousand cubic inches of air. But even this, while a perfectly safe procedure, is too complicated a one for general adoption, so that we would all probably gladly welcome any drug, or combination of drugs, that would combine safety, efficacity and smallness of quantity required. These desiderata are found, I believe, in the A. C. E. mixture. As the mixture only contains a third part of chloroform, which is admitted to be the dangerous element, we have the advantage of giving the poison in a comparatively dilute form, in other words before we can kill him with the chloroform we shall have anæsthetized him with the ether, and stimulated him with both the alcohol and ether. In other words again, the patient inhales four parts of stimulant for two of depressant.

It certainly is a matter of fact that we can produce complete anæsthesia during a longer period with six drachms of the A. C. E. mixture than we could with two drachms of chloroform alone. And while alcohol alone cannot be endured as an anæsthetic, introduced through the lungs, although the oldest employed through the stomach, yet when mixed with chloroform and ether it ceases to irritate the bronchial tubes.

The question may arise whether bichloride of methylene and the A. C. E. mixture are one and

the same thing." In reply I may quote Mr. Clover, who, in a recent article in *Quain's Dictionary of Medicine*, states that bichloride of methylene is an unreliable compound of chloroform, because the ether in it being more volatile than the other ingredients may after a time escape and leave a more powerful substance than we suppose we are handling.

He also says that it is better to mix, in small quantities at a time, one part of alcohol, two of chloroform and three of ether, and to keep the bottle so well corked that the ether is not likely to evaporate and leave chloroform in excess.

If we add up the chemical formula of these respective quantities of these three drugs we get a result very nearly approaching the theoretical formula of bichloride of methylene.

Although it is not quite certain that they are identically the same, it matters very little, as the effects of the A. C. E. mixture, as I have found them, correspond exactly with those of bichloride of methylene, as reported in many thousands of cases. While the only disadvantage which Mr. Clover sees in the bichloride of methylene, can be completely obviated by preparing the mixture fresh every time we use it, according to the A. C. E. formula.

At a meeting of the Medical Society of London in April, 1868, Mr. Marshall read a paper on Bichloride of Methylene, for the production of general anæsthesia. He had constantly used the anæsthetic during the past six months, both in private and hospital practice and for the performance of capital operations, and he has arrived at the conclusion that it is preferable in all respects to chloroform. It was more manageable than chloroform ; anæsthesia is more readily produced by it, and is more persistent; that there was less excitement, and what might be called inebriation, than in the case of chloroform, and that its exhibition was not followed by headache or prostration, nor so frequently by vomiting.

It had never yet proved fatal, and in those animals that had been killed by it there was found less disturbance of the equilibrium between the heart and the lungs.

Mr. Marshall mentioned several cases in which he had given the bichloride of methylene for tooth extraction, and he did not observe any of the disagreeable after-effects of chloroform to follow.

At a meeting of the Medical Chirurgical Society of London, October, 1871, in the course of a discussion on Anæsthetics, Mr. Curling, the president, regretted that no notice had been taken of the proposal of the Society's committee to use the mixed vapor of alcohol, chloroform, and ether. Mr. Spencer Wells said that he did not care whether chloride of methylene was merely a mixture of chloroform and ether, or not, as some said it was, he had proved it to be the best anæsthetic, and preferred it to all others.

Dr. Sansom said that while a mixture of chloroform and ether only was open to the objection that the ether went off first and left the chloroform, the objection did not hold when alcohol was added, as it had the effect of restraining them both.

In the *Lancet* of May, 1871, Mr. Rendle, the surgical registrar of Guy's Hospital, after stating that his opinion was based on personal experience of some hundreds of cases, says that the chemical composition of bichloride of methylene had not been found sufficiently uncertain by him to interfere practically with the physiological effects, and no dangerous symptoms had occurred in his practice.

He had decided to use no other, unless specially requested by the patient or operator; and he felt sure that anyone who would give it an impartial trial would be of the same opinion. He had given it for operations lasting one hour, when the operator was able to commence in three minutes, and recovery was rapid, and not followed by sickness ; and also for operations lasting less than a minute, where all was finished and the patient sitting up within 5 minutes, without the slightest unpleasant sensation.

Mr. Morgan, house surgeon of the Ophthalmic Hospital at Moorfields up to 1872, had given it more than 1800 times, and to persons of all ages, from a few weeks up to 91 years, but had never lost a case. He gave it from a perforated frame covered with flannel and fitting well to the face, 2 drachms at first, and 1 drachm afterwards when required. He only considered it necessary to watch the color and the breathing. He would never use anything else if he had his own choice.

Mr. Philip Miall, surgeon to the Bradford Infirmary, England, who has employed this anæsthetic in a large number of cases, states that insensibility in adults is usually produced in about two minutes ; one dose of a drachm being usually sufficient to produce anæsthesia. The respiration is usually quickened, the pulse lessened in frequency.

On account of the immunity from sickness of the stomach it gives this anæsthetic is much used in ovariotomy; and on account of the rapidity with which persons can be brought under its influence it is preferred in some English ophthalmic institutions where many operations are performed.

Sir Spencer Wells said, at the meeting of the British Medical Association in 1877, that he had, five years previously, made known his opinion that all the advantages of complete anæsthesia, with fewer drawbacks, could be obtained by the use of bichloride of methylene than by any other known anæsthetic. He had based that opinion on an experience of five years and three hundred and fifty serious operations. During the next five years, from 1872 to 1877, he had employed it in over six hundred cases of ovariotomy and many other cases of surgical operations, and that his former opinion had been fully confirmed. Given properly diluted with air, this anæsthetic had, in his experience of ten years—with more than a thousand operations of a nature unusually severe as tests of an anæsthetic proved to be, without a single exception, applicable to every patient, perfectly certain to produce complete anæsthesia, relieving the surgeon from all alarm and even anxiety; and its use had never been followed by any dangerous symptoms which could be fairly attributed to it.

With regard to the mode of administration, Junker's apparatus is certainly the best, as by this means the patient cannot possibly breathe the anæsthetic vapor without air, a current of which is pumped through the liquid to be inhaled, and with which it is charged to the extent of three and a half or four per cent. But as this apparatus necessitates the entire attention of some one to work it, it is more suitable for hospital practice where the services of a chloroformist can be retained. I use an inhaler consisting of a tin box made to fit accurately to the face by means of an air-cushion around its edges, which can be reinflated whenever the inhaler ceases to make a perfect fit. There is a wire cage containing a sponge upon which the anæsthetic is dropped or poured, and through which all air must pass to get to the patient. But any ordinary inhaler would do, and indeed in obstetric practice I prefer a handkerchief, which is less apt to alarm the patient whom I tell to moisten it with the A. C. E. mixture from time to time. In the intervals between the pains I tell her to keep it folded up tight in her hands. I do not consider it necessary nor advisable to render the patient completely unconscious. I prefer to content myself with merely dulling the pain until the head is coming through the vulva, when I allow her to take enough to put her completely under its influence. It must be remembered that the barometric pressure and the hygrometricity or moisture of the atmosphere makes a great difference in the amount of vapor given off from any volatile liquid. So that it is necessary to give the patient more air on a fine dry day than in dull wet weather. In fact, air is a thing that no anæsthetic or other vapor can for more than a minute or two replace with safety, and I can see no reason or right in crowding the anæsthetic into a struggling patient. If we want to produce anæsthesia by asphyxia we need not use ether or chloroform; simple nitrogen will do equally well.

To sum up: 1. It is an effective general anæsthetic, producing as deep insensibility as chloroform.

2. Its action is rather more rapid than chloroform, but to develop its effects more of it is required, the proportion being about as 6 is to 4.

3. It produces a less prolonged second degree of narcotism than other anæsthetics.

4. When its effects are fully developed the narcotism is very prolonged and is reproduced with great ease.

5. Its influence on the nervous centres is more uniform, and it creates little if any disturbances or break of action between the respiratory and circulatory functions.

6. The final escape from the organism is rapid. so that the symptoms of recovery are sudden.

7. In some cases, but very rarely, it produces vomiting.

8. When it kills it destroys by equally paralysing the respiratory and circulatory mechanism.

I feel sure that if any of you who have not tried it will give the A. C. E. mixture a fair trial you will not fail to be pleased with it. All those who have tried it have expressed their complete satisfaction with it, while for my own part, especially in my obstetric practice, I am simply enthusiastic.

Progress of Science.

A YEAR'S EXPERIENCE IN TRACHEOTOMY.

George M. Gay, M. D., writes, in the *Boston Medical and Surgical Journal:* During the year 1883 I performed tracheotomy twenty-one times for croup. Eleven patients recovered. All but one, a fatal case, were treated in the City Hospital. The cases were not selected, every one coming under our charge being operated upon if requiring it.

Many of the patients had diptheritic croup, a few membranous, and, occasionally, it was not easy to make an exact diagnosis. Cases presenting enlarged glands and a nasal discharge early in the disease were undoubtedly diphtheritic. On the contrary, cases beginning as an ordinary cold, with no membrane visible in the fauces, no septic symptoms, but having a severe and constant dyspnœa, were called membranous croup. It is not of the utmost importance that much time be spent in discussing the difference between the two varieties of croup, considering the fact that both are extremely dangerous to life, and that both demand essentially the same treatment. Suffice it to say, that all of the cases presented severe and continued dyspnœa, due to an acute laryngeal obstruction of from one to five days' duration.

One patient was twenty-four years (died); the age of the others varied from eleven months to nine years; a majority were four or five years old. The youngest who recovered was three.

The duration of the diseases at the time of the operation ranged from one to eight days; the dyspnœa from one to five days. As a rule, the shorter the period of obstructed respiration the more favorable the result.

No ether was used in eight cases, and only a few whiffs in the others; merely enough being given to partially control the struggling and fright. Generally, the patient had rallied from the anesthetic before the tube was secured in its place.

Two children died of shock and septicemia a few hours after the operation; the other fatal cases survived from two to five days. None died from hemorrhage. Death resulted from either bronchitis or blood-poisoning. Every case but one derived more or less temporary relief from opening the trachea, and, so far as I know, no life was shortened by the operation. The upper rings of the tranchea were usually incised, and also the isthmus of the thyroid, if necessary. In a baby lately operated on at the age of nine months the cricoid cartilage was divided with the result of greatly facilitating the introduction of the tube.

Venous hemorrhage was quite free in many cases, but no trouble was ever experienced from blood getting into the bronchi. By inserting a tenaculum or hook into the trachea just below the cricoid cartilage and lifting it up the windpipe is under control, and it is not necessary that the rings be exposed before they are divided. At all events I have not found it to be so in many of my later operations. Beginners, however, had better see the rings before they cut them. The tube having been secured by tape, a piece of cotton flannel spread with cosmoline is placed between the plate and the skin to prevent irritation.

After Treatment: Milk, ice-cream and beef-tea were the favorite articles of food. Nourishment was also administered by the rectum. Alcohol was never given unless the patient exhibited symptoms of marked exhaustion, when champagne was added to the diet. Several of the successful cases received no liquor during the treatment. Quinine and aromatic spirits of ammonia were given in every instance, while iron and chlorate of potash were not resorted to.

Next to nourishment I consider *steam* to be the most important part of the treatment. It is conducted from the radiator through a rubber tube, and directed upon the neck of the patient. The vapor is warm, moist, and does not condense in sufficient quantity to staturate the clothing. Atomized or medicated liquids are not used at present. Lime-water often produced a disagreeable erythma of the face, and thinking that possible it might act as an irritant to the air passages, pure steam was substituted, and so far it seems to act as favorably as did any of the sprays formerly in vogue.

In all cases the patient received steam half the time, while to the more serious it was constantly supplied. The very great benefit derived from breathing the warm vapors was demonstrated beyond a doubt in many instances. Under its use the secretion would soften, the respiration would become easier, the child would become quiet, and fall asleep. The importance of a constant and generous supply of steam cannot be over-estimated in this affection.

In the favorable cases the tube was worn from six to fifteen days; the average time being nine days and a half. I have found the most satisfactary way of getting rid of the tube to be as follows: At the end of a week, if the respiration is free, the tube is taken out quietly, and the child is let alone. No trials are made to see if he can breathe through his mouth. As the treacheal wound contracts natural breathing through the larynx is gradually restored. With one exception this plan has worked well. In the case of a little girl, after the tube had been taken out, occasional attacks of dyspnœa would come on, which were relieved by the nurse's opening the wound with the dilators, and turning on more steam. The child soon learned to call for this instrument whenever she felt an attack approaching. The use of the tube was not again resorted to, and in a few days the dyspnœa ceased and the patient recovered.

I cannot close this paper without calling attention to the importance of having intelligent, skillful and devoted nurses in charge of these patients. Two sets are necessary, one for the day and another for the night, and they should have received special instruction in taking care of the tube, and also in removing or placing it in an emergency. I cannot but feel that my success during the past year was due in no small measure to the admirable care which the patients received from the nurses of the hospital training.—*Louisville Med. News.*

BUTTERMILK IN SICK STOMACH.

Dr. R. J. Peare thus writes in the *Therapeutic Gazette*, April 15, 1885:

An irritable stomach, it will be admitted, is often a most serious complication in the management of sickness. In occasional cases, of no particular gravity otherwise, oftenest in diseases of children, this difficulty leads to a fatal issue. Buttermilk, so far as I am aware, is an untried remedy in such cases. I have had some experience recently with it, quite satisfactory in a few instances. Four cases of persistent vomiting occurring in succession, intolerant of any other treatment, gave way kindly to this.

Case 1 was that of a child about two years old. The vomiting was unaccompanied by other sickness. The child had not retained anything, fluid or solid, for two days; the food being almost immediately ejected. I suggested buttermilk in teaspoonful quantities, every ten, then every five minutes, the milk to be quite cold and as fresh as possible. The vomiting did not recur, and in two days the child had changed from a condition of impending death from collapse, to nearly its normal condition. In place of teaspoonful quantities, the stomach soon sustained larger ones, and so on till an ordinary quantity could be taken.

Case 2 was that of a nursing child suffering from a mild derangement of the digestive process, accompanied by fever and persistent vomiting while anything remained in the stomach. The mother's milk was immediately rejected. I again ordered buttermilk, in the same manner as before, much to the surprise of the parents. Next day the father reported that there had been no vomiting from the time this treatment was commenced.

Case 3. This was an adult female. Three weeks before she had been confined, and at this time was suffering from a mild attack of peritonitis, with constipation and nervous troubles. There was constant nausea in this case, even when the stomach was empty—a feature in which it differed from the other three. Buttermilk was cooled with ice, and carefully given in gradually-increasing quantities till it was retained quite well, after other remedies had all failed, and in twelve hours it could be taken freely. The nausea was overcome with more difficulty in this case than in the others.

Case 4 was that of a child one year old and weaned. The mother had been away from home some distance with the child, visiting. While absent, a slight diarrhœa occurred, accompanied by sick stomach. When I saw it the stomach difficulty predominated greatly. Everything given was immediately expelled with force. The mildest remedies were not retained a moment. The stomach was intensely sour, and food taken therein days before was passed from the bowels undigested. Buttermilk, as directed in the other cases, was ordered, with lime-water. The vomiting subsided very quickly, and the stomach could soon tolerate boiled milk thickened with flour. This change became necessary on account of the condition of the bowels, which now became as intolerant of the buttermilk as the stomach had been, the milk passing through immediately after ingestion. After the change of food no passage occurred for twenty-four hours.

Four successful cases will, of course, not establish the value of any remedy, but the recital of them may lead to further trial.

So far as I have observed, buttermilk does not coagulate in the stomach, as does new milk. This is, perhaps, its only advantage over the latter, but one of inestimable value, since the coagulation of new milk casein, so likely to occur, utterly forbids its use in many cases. In the "summer complaints" of children, for instance, buttermilk might be found eminently appropriate.

THE TREATMENT OF TAPEWORM.

Dr. James Tyson thus writes in the *Med. News*, March 7, 1885:

There is, perhaps, no one condition which has brought more opprobrium upon the medical profession and more "grist to the mill" for quacks, than tapeworm, and to our humiliation it must be said that quacks do seem to have more success in getting rid of tapeworm than we do. There are, I think, two reasons why this is so. In the first place, it is certain that they do not use different remedies from those commonly in use by the profession, but they give larger doses. In the second place, they see a large number of cases and develop a sort of specialty, which, like all specialties, produces greater skill in treatment. When I say quacks, I mean more particularly advertisers and those who use secret remedies; for in their treatment of tapeworm, they undoubtedly use remedies which experience shows to have been useful.

In order that a tapeworm may be successfully treated, it is necessary that it shall have a certain size; so that if a large part of the worm has been brought away by medicine, it is useless to give anything more until the remaining part increases sufficiently in size.

There are half a dozen remedies for tapeworm, and they are all good. I think that the two best are probably the ethereal extract of male fern and

kooso. Some prefer the first of these, while others prefer the second. In my hands, kooso has been decidedly the most efficient—that is, having failed with everything else, and having succeeded with kooso, it has naturally become the remedy with which I always begin the treatment. It is the dried flowers and immature fruit of the Brayera anthelmintica, a tree native to Abyssinia. It is given in the form of a powder, and the only objection to it is its bulkiness. The dose is laid down as a half to one ounce of the powder in half a pint of water. I prefer to give the larger dose, for it is harmless, except in pregnancy, and I am sure that failures are often due to the smallness of the dose administered. Kooso is said to have produced miscarriage; therefore, it should not be given to pregnant women.

Patients require some preparation before any remedy is employed. I always tell them to eat nothing from noon of one day until the next morning, when one ounce of kooso in half a pint of water is directed to be taken. If at the end of six hours no movement of the bowels has taken place, a promptly acting aperient, as a dose of oil, compound jalap powder, or elaterium, is taken, but generally kooso requires no purgative after it. This usually brings away the worm entire. Of course, you are never certain that you have the entire worm until you find the head. At the same time, it does not follow because the head cannot be found, that you have failed to remove it, for it is very small, and may have been lost in the discharges. As I have said, in the tænia solium the head is about the size of a small pin's head; in the medio-canellata, it is somewhat larger, and in the bothriocephalus latus it is still larger. If the head has not been removed, you may be certain that in a certain length of time the worm will grow out again. This varies from ten to sixteen weeks.

Instead of kooso, the resin which it contains, called *koosin*, may be given; but I have had no experience with it. The dose is 20 to 40 grains enclosed in a wafer.

The next remedy in efficiency is the ethereal extract of the rhizome of Aspidum filix mas, whose active principle—an eleo-resin—is extracted by ether. The preparation of the patient is about the same as for kooso. The dose is half a fluid-drachm to a drachm. The larger dose should be given. It is a dark, thick liquid, bitter, slightly acrid and nauseous. Instead of the ethereal extract of male fern, the oil may be given in a gelatine capsule, which is the best vehicle for these unpleasant oils. Six or eight hour later, a dose of purgative medicine should be administered. An important point to be borne in mind is the varying quality of these drugs, and that they deteriorate with age.

The next remedy in order of efficiency is the bark of the root of the pomegranate. This has been given in the shape of a decoction, about two ounces to the pint, and the dose is a pint. Recently there has been introduced an alkaloid obtained from pomegranate, named pelletierine, in honor of the chemist, Pelletier. This is sold in a single dose, the price of which is, I believe, three dollars. When first introduced, it was vaunted as a "sure cure;" but the experience of practitioners in this city has not been uniform, and success has been by no means invariable. Very recently, however, I have known a case to have been successfully treated with pelleteriene after all else had failed, including large doses of turpentine, and including pelletierine itself. When successfully used, the dose of pelletierine was given after twenty-four hours' fasting and no preliminary purgation. In fifteen minutes afterwards, one drachm of compound jalap powder was taken. In an hour and fifteen minutes, the entire worm, including the head, was passed. When pelletierine was unsuccessfully used, it was preceded by a day and a half fasting, during which two doses of castor oil were taken.

Kamala, the hairs of the Rottlera tinctoria, is said to be very efficient in tapeworm, but I have had no experience with it. It is given in doses of from one to two drachms suspended in syrup, repeated in eight or ten hours if it do not purge. It is purgative, sometimes drastically so. It may also cause nausea and vomiting.

Another remedy, which is an excellent one in this affection, is oil of turpentine. At the same time, it is apt to produce such unpleasant symptoms that it would be the last which I should use. The dose is from an ounce to two ounces mixed with twice that amount of castor oil.

The last remedy which I shall mention is pumpkin-seed. This was used very commonly some twenty years ago. It was the remedy which I always used until frequent failures induced me to give it up. There are two ways in which it may be given. Two ounces of the seeds may be crushed in a mortar with water, then strained, and the emulsion taken fasting, the patient having dieted the previous day. A few hours later, a brisk purge should be taken. Or the seeds may be made into an electuary, which is almost as pleasant as sugar candy, and often is about as effectual.

I should place these different remedies in the order of their efficiency as follows: kooso, male fern, pomegranate and pelletierine, kamala, turpentine, and, lastly, pumpkin-seed. I am inclined, however, to give pelletierine an early trial, in consequence of its recent successful use in the manner referred to.

I have already stated that it is important to know the variety of worm present for the purposes of prognosis and treatment. The easiest of these worms to dislodge is the bothriocephalus latus, because it has neither the hooklets nor the rostellum of the other varieties. The next in ease of removal is the tænia medio-canellata, which, although it has the four suckers, lacks the hooklets which give the tænia solium its firm anchorage. Of all the forms

of tapeworm, the most difficult to dislodge is, therefore, the tænia solium; for it not only has the four suckers, but also the double row of hooklets. I believe, however, that if a more active course of treatment than is usually recommended be pursued, our efforts will be more successful.

TREATMENT OF CHRONIC ULCERS OF THE LEG.

Every physician and surgeon has his perplexities, in the practice of his profession. I have had many perplexities, but the management of old chronic ulcers, so frequently seen by the surgeon, has been to me one of the most difficult undertakings, until the last five years. Since that time I have adopted a course of treatment quite different from any laid down in our text-books. The plan adopted by me is that of sponge-grafting. The treatment is not original. I saw it mentioned in some medical journal about five years ago. Having had a case of sponge-grafting of a little different nature, it occured to me that sponge-grafting for the cure of ulcers, and especially of the leg, would be worthy of a trial. About ten years ago I was called to see a young man (a carpenter by trade), who had driven a two-inch chisel into the inner side of his knee, cutting the anastomotica magna artery. The hæmorrhage was very great. Dr. A. A. Shobe, of Jerseyville, Ill., was called at the same time. Upon consultation we agreed to ligate the artery, but upon search for proper instruments for that purpose, we found we did not have them at our immediate command. The bleeding continuing profuse, I tore off a small piece of sponge, and grasping it in a pair of dressing forceps, dipped the sponge into a strong solution of tannic acid and crowded it into the cut. The bleeding stopped. I simply put on a common roller bandage, elevated the limb, and left the patient with instructions to keep quiet. I saw him every day for four days, and everything being all right, I did not remove the sponge.

Dr. Shobe, on the sixth day, insisted on the removal of the sponge. I made the effort at removal, but could only pinch off small pieces with the forceps, and in the pieces extracted I could plainly see the cause of the sponge adhering so firmly—the granulations had sprung up and insinuated themselves into the interstices of the sponge, and, having locked themselves fast into the sponge, when I would pull off a piece I would break off the granulations and cause bleeding. I saw the best thing to be done was to let it alone. My patient was out in about fourteen days on crutches, and in about six weeks was entirely well. The sponge was removed only by absorption.

Now I will describe my treatment for ulcers. The size of the ulcer makes no difference. I first cleanse the ulcer with castile soap suds, then dry it off, and, having previously prepared my sponge, I place it on the ulcer. The next thing to be done is to place over the sponge a piece of lead-foil sufficiently large to cover the sponge, then, over that, a rubber bandage to hold the sponge and foil down in such a manner as to make equal pressure, but not so tight at the same time as to interfere with the circulation. The bandage and lead-foil must be removed twice a day, for the purpose of dressing the ulcer, being very careful not to lift the sponge out of the ulcer. I generally use for washing and disinfecting, the ulcer and sponge the following: Equal parts of distilled water, glycerine and listerine, or the following: Aquæ dest., glycerini, aa ℥ ij; acidi carbolici, 95 per cent., ʒ ij. M. I use either of three by means of a small syringe. After dressing the sponge and ulcer in this way, I replace the foil and bandage as before. In a very few days you find the sponge will not fall off so very easily, for the granulations having sprung up and locked themselves into the interstices of the sponge, hold the sponge, fast; at the same time absorption of the sponge is going on. So by the time the ulcer is healed the sponge is absorbed. This gives the doctor no trouble, and the patient can attend to it himself. Rest, at the same time is a very great desideratum, though I have cured many cases where the patient continued to follow his daily avocation. The preparation of the sponge is of great importance. I select a very fine sponge (a surgeon's sponge), wash it clean in distilled water, then immerse it in nitric acid, c. p., for the purpose of cleansing it of all lime or other earthy matter that may be in it. I rinse it through a half-dozen washings of water to get the acid out as nearly as possible; then I immerse it in carbolized water, when it is ready for use. The sponge must be cut a little larger than the ulcer, and very thin. The sponge acts at the same time as a protection to the granulations, and keeps them from being destroyed—*Dr. Du Hadway*, in the *Weekly Med. Rev.*

SIMULO IN EPILEPSY.

In the first number of *El Boletin Medico*, published at Trujillo, Peru, Dr. Larreay Quezada recommends the treatment of epilepsy by an Indian remedy "simulo," which is the fruit of *Capparis Coriacea*, a plant indigenous in Peru. *Melocharn*, a conserve made from another plant belonging to the same natural order, is also used in epilepsy. Of the powdered simulo, 45 grammes are mixed with 500 grammes of the sweet sacramental wine, and of this a wineglassful is to be taken night and morning. In his own case, this treatment was most successful. As a boy, aged 13, he had fourteen epileptic attacks, preceded by a distinct aura, but under this treatment the fits left him. Since he has been in practice he has employed simulo extensively in epilepsy, hysteria, and other nervous diseases.

BICHLORIDE OF MERCURY IN DIPHTHERIA AND CROUP.

Dr. William M. Thalon contributes two articles on this subject to the *N. Y. Med. Jour.* Dr. Pepper, of this city, is a great advocate of this treatment. He uses it in large doses, with the following rules to guide him: If the false membrane is increasing; he increases the drug; if it is stationary, he maintains the same dose; if it is decreasing, he diminishes the remedy, and if the membrane has disappeared, he at once stops the bichloride.

He has found it convenient to have two standard formulas, according as he wishes to combine iron with the mercury or not. He generally writes for a three-ounce mixture, with half a grain of the bichloride, so that each teaspoonful contains about one-fortieth of a grain. The following are his prescription models:

Formula 1.—℞. Hydrargyr. bichlor., gr. ss; tinct. ferri. chlor., f. ʒ iij; glycerin., f. ʒ ss; aquæ, q. s. ad. f. ℥ iij. M. Sig. f. ʒ j. as directed, in water. Formula 2.—℞. Hydrargyr. bichlor., gr. ss; vin pepsin., elixir bismuthi, aa ℥ iss. M. Sig. f. ʒ j, as directed, in water.

The second formula is the pleasantest way of prescribing the remedy, and it is the one used by Dr. Pepper.

Practically, he now generally begins with the second formula, and, when convalescence has commenced, resorts to No. 1 to get the benefit of the iron.

He does not attempt to explain the action of the bichloride; but bases his claim that it will give better results than other treatment know at present entirely on clinical evidence. An important point is that the drug should be well diluted, whereby its irritating properties are avoided.—*Med. & Surg. Reporter.*

ICE TO THE SPINE IN OBSTINATE VOMITING.

Dr. Wm. L. Davies, in the *Mississippi Valley Med. Mo.*, April 10, 1885, says: I was called to a patient, æt. forty-seven, the mother of nine children, suffering from a severe typhoid fever with intractable vomiting, which had persisted for several days. All of the ordinary means failed to control the condition of the stomach, and even pellets of ice were instantly rejected. High temperature characterized the fever, and every effort was made for its reduction, believing that it had much to do with the production of the nausea and vomiting, but the latter prevented the medication indicated for this purpose.

Menstruation had been normal for some time, except the epoch just preceding the atrack of fever, which, although the flow made its appearance, was but limited in quantity. From the age of the patient and the number of children she had borne, I was inclined to the belief that the climacteric was a factor in the gastric derangement. Thinking, therefore, that the vomiting might depend upon reflex disturbance of uterine origin, or ill-defined spinal derangement, I applied ice in considerable quantity to the lowest part of the spine. The vomiting ceased instantly, and a profuse perspiration followed. The use of the ice was persisted in only as the indications appeared to demand it. Taking the hint from this, however, cool sponging was instituted with marked benefit, so that the use of the extreme cold to the spine was only of occasional necessity. With the exception of anodyne injections to produce rest at night, little other treatment was ordered. The subsequent progress of the case was satisfactory, and the ultimate recovery complete in about the average time.

The history of the case since her getting up has not confirmed my conclusions in regard to the menopause.

DESQUAMATION IN SCARLET FEVER.

Mr. George Smith states in a note in the *Bristol Medico-Chirurgical Journal*, that he has for several years been in the habit of having his patients sponged over the whole surface of their bodies twice a day—commencing, as a rule, about a week from the appearance of the eruption, and continuing the process until desquamation is complete—with a mixture of one ounce of oatmeal to one pint of boiling water. The solution must be made fresh every day, and used tepid, or at such a temperature as may be comfortably borne by the back of the finger. His reason for using this particular form of scalded, not boiled, oatmeal, is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing their removal, from one sponging to another, without the ordinary risk of infecting either atmosphere or clothes, and greatly lessening the risk of spreading the disease. Secondly, this same gluten fills up the cracks of the new skin and protects it from cold, as, patch after patch, it becomes bare, and thus greatly lessens the risk of the dropsy which often follows this disease.

HAZELINE IN MENORRHAGIA.

In the *Practitioner*, Aug., 1885, p. 141, Mr. M. Chute describes a valuable remedy for menorrhagia, which is a very frequent ailment in women in Cape Colony. Two drachms of hazeline, given twice or thrice a day, will act so quickly that it is not necessary to anticipate the flow; but when menstruation, after it has lasted the ordinary time, is not closing naturally, hazeline, given as above, will effectually restrain it, and after hæmorrhage has ceased there is no advantage in continuing the drug. Another good result produced by hazeline is, that it relieves the pain of dysmenorrhœa in a very quick and marked manner.—*Phil. Med. and Surg. Rep.*

THE TREATMENT OF CHRONIC BRIGHT'S DISEASE.

Dr. Dana, of Portland, Me., concludes a carefully-prepared paper (Boston *Medical and Surgical Journal*) with the following practical suggestions:

1. One of the most important indications is to avert or reduce hyperemia and inflammation of the kidneys. With this end in view a uniform and sufficient warmth of the surface of the body should be maintained. In this disease, and also where predisposition to it exists, when the large amount of blood normally present in the cutaneous capillaries is reduced by chilliness of the surface, a corresponding hyperemia of the renal capillaries is very likely to occur. In a case recently under my observation, of the typical parenchymatous nephritis form, the man owned and steadily worked upon a farm located upon a narrow neck of land, projecting out from the Maine coast into the sea, and commonly swept by cold and damp winds, often sudden and severe. Frequently, when covered with profuse perspiration, his skin would become chilled with the wind, and he had himself noticed an apparent connection between these experiences and the development of his trouble. A moderately warm and equable climate is a great advantage. A sufferer from this disease, who is so favorably circumstanced as to be able to avail himself of different climates for different seasons of the year, so that he can have the benefit of free out-of-door life all the year round without risk of becoming chilled, has his chances of prolonged and comparatively comfortable life thereby greatly increased. Woolen undergarments should be worn thick enough to insure warmth without inducing sweating. A flannel night-gown is advisable in cold weather. In acute exacerbations of the disease, attended with increased heat, the patient should be kept in bed, between blankets, for days, or weeks. The importance of maintaining a uniform warmth of skin in this affection does not seem to be fully appreciated by the average practitioner. Local applications to the lumbar regions are useful, such as leeching or cupping, followed by warm fomentations, especially when a sense of heat and heaviness has arisen, with scanty secretion of urine. I have found advantage in large packs. Several thicknesses of towels may be used, large enough to thoroughly envelop the small of the back and come round somewhat freely upon the abdomen. These should be rung out in tepid water, covered with oiled silk or impervious paper, and bound firmly on with a flannel swathe. A small blanket, folded once, may then be wrapped and firmly pinned round the body below the waist. These, having been worn for the night, are removed in the morning, the skin is sponged with cold water, and rubbed dry, and a flannel swathe is worn for the day. Mild diluent diuretics are sometimes called for.

2. A second indication is to unload the obstructed uriniferous tubules of their accumulations. The thrown-off and altered epithelial cells, transuded fibrines, extravasated corpuscles, and fatty débris, sometimes in the form of casts, frequently occlude the tubules, and add to the existing disability of the kidneys. Simple diluents and mild diuretics are then needed, such as cream-of-tartar water, and pure natural waters like the Poland spring water. They should be drunk freely, and, by preference, on an empty stomach, so as to be quickly absorbed and passed off through the kidneys.

3. A third indication is to build up the blood and promote nutrition. Whether, or not, the blood is ever the starting-point of the morbid process in the system it is certainly true that the peculiar anemic look of the patient is often the first thing that arouses iu the mind of the physician a suspicion of the true nature of the disease, while, in the advanced stage, the blood is constantly found impoverished and depraved to the last degree, and utterly unfit to maintain healthy nutrition. Of the large class of building-up remedies I will mention, as specially useful, the mistura ferri et ammonii acetatis, cod-liver oil, and malt. Judicious and persistent use must be made of this class of remedies.

4. A fourth indication is to improve the condition of the nerve centers. The importance of this indication is specially plain in the cirrhotic form of the disease occurring in painters and others who have been exposed to poisoning by lead. Here the iodide of potassium, the dose of ten to twenty grains, conveniently administered in half a tumbler ful of Vichy water, may be given three times a day forlong periods of time, with markedly good results. The same method is applicable to cases of syphilitic origin, or occurring in systems specifically infected. In such cases the corrosive chloride of mercury in small doses may be substituted for the iodide of potassium for the period of a few weeks, from time to time, with advantage. In some of the cirrhotic cases of unknown origin, I have found great benefit from the use of the chloride of gold and sodium, as suggested by Bartholow, in the average dose of the twelfth of a grain in pill form, after each meal. I have seen periods of marked improvement of general condition and special relief of distressing nervous symptoms follow its use. Arsenic, in small doses, and the hypophosphites are sometimes useful.

5. The fifth indication is to promote the elimination of urea from the blood. In order to appreciate the importance of this indication we have only to remember that uremia constitutes the chief danger of the disease, a fatal apoplectic seizure being occasionally its first revelation; or, to call to mind the fearful sufferings of the paroxysms of uremic dyspnea, uremic headaches, and uremic convulsions. Here we must mainly rely upon vicarious evacuations by the skin and bowels, and I believe that sudorifics are the most valuable class of remedies. Profuse diaphoresis may be induced by hot air and hot vapor-baths, and by

the internal administration of various drugs, of which jaborandi is by far the most valuable as an eliminator of urea from the blood. But the means which I have found at once the most efficacious and convenient is the hypodermic injection of pilocarpine. I have resorted to this method many times with the best results. The dose used is generally a quarter of a grain, the patient being in bed between blankets, and I usually find the entire surface of the body covered with a profuse sweat within the space of five minutes. When the process of diaphoresis is over, the skin may be wiped dry, and fresh clothes put on. The amount of the secretion is enormous, and the elimination of urea has been shown to be large. Great relief of the uremic symptoms is often obtained by the daily use of this method for a series of weeks. I have seen, in a case still fresh in my mind, headache, dizziness, dyspnea, unrest, marked impairment of vision, and heart irritability so largely and rapidly subside as to raise a doubt in the minds of friends, and even of the attending physician, as to the correctness of a diagnosis, unhappily confirmed by the later history of the case, and at last by the autopsy. I recommend the plan to my professional brethren, cautioning them to be sure to get an article of good quality.

6. A sixth indication is to evacuate dropsical accumulations. For this purpose mechanical methods are sometimes useful, such as acupuncture of the legs, prepuce, labia, etc., or a short incision over one of the malleoli. Tapping of the abdomen is generally to be avoided in renal dropsy. Erysipelas is specially liable to follow operative methods in this form of dropsy. Hydragogue cathartics, which are often so well borne, and so satisfactory in results in cardiac dropsy, are neither so safe nor so useful in the dropsy of Bright's disease. Sometimes, however, resort must be had to elaterium in suitable doses and combinations. Sometimes making temporary use of the remaining powers of the kidneys, diuretics may be given, especially the infusion of digitalis with the iodide of potassium or cream of tartar. But I believe that in this disease, not only for the elimination of urea but also for the evacuation of dropsical accumulations, the hypodermic use of pilocarpine is not only one of the safest, but also one of the most effective measures at our command. It is a good plan to alternate the various methods laying the burden of vicarious service alternately upon the different organs. The Basham's mixture, above mentioned, besides being useful as a blood estorer, often acts as a gentle tonic-diuretic.

7. A seventh indication is to sustain the heart. It has been shown by Johnston and others that in the inflammatory forms of the disease the walls of the small arteries and capillaries are very constantly thickened, and their caliber diminished. Indeed, it has even been proposed to call the disease an "arteriocapillary fibrosis." Associated with this vascular affection, if not indeed caused by it, is found hypertrophy of the left ventricle of the heart, which very generally at last undergoes fatty degeneration and dilatation. It is, therefore, a matter of great importance to save the heart, if possible, from all strain. No over-exertion of the body or mind should be allowed. Excitements of all kinds should be avoided, and tranquility of mind should be promoted. Digitalis and strychnine are perhaps the two drugs most used, from time to time, to strengthen the heart's action.

8. My last indication is to palliate the suffering of this distressing disease. The methods for this are in large measure involved, and have been mentioned under other heads. As much of the distress doubtless arises from uremia, so the most lasting relief is that which comes from the elimination of the urea. I will mention a few items here. In the fits of dyspnea prompt relief is sometimes obtained from the hypodermic injection of the quarter of a grain of morphia with the hundred and twentieth of a grain of atropine. The nitrite of amyl quickly affords relief in some cases, a few drops being put upon a handkerchief and held to the nose. The same use of morphine and atropine is often useful in convulsions, restlessness, and general nervous disturbance of the advanced stages of the disease. For the headache and dizziness a scruple of bromide of sodium in a teaspoonful of syrup of lactophosphate of calcium may be given three times a day, and for the insomnia thirty grains of bromide of potassium, with seven or eight grains of chloral at bedtime. For the uremic coma I have found the hypodermic use of pilocarpine by far the most effective remedy.

For diet, as a rule, any articles of plain and simply cooked food may be allowed which the appetite inclines to and the stomach is able easily to dispose of. In some cases advantage is found in restricted diet of milk, skim-milk or butter-milk.

Finally, while chronic Bright's disease is, at least, very generally fatal, yet the fatal issue is not necessarily a speedy one, and years of comparative comfort and effectiveness may sometimes be added to valuable lives by constant watching and judicious treatment.

GONORRHŒA EASILY CURED.

Dr. Z. T. Dellenbaugh (*Coll. and Clin. Record*): In cases of acute gonorrhœa I have, for eight or ten years, used carbonate of lithia to alkalinize the urine; and find the five-grain compressed tablets, one taken three times daily, very convenient, fulfilling every indication better than any other salt. I now rarely find it necessary to give any other remedy internally.

Should the case fail to respond to the following injection, and not show marked improvement in two or three days, two sandal wood oil capsules may be given three times daily for three or four days. The injection I have used in acute and sub-acute gonorrhœa for more than a year, with the most gratifying results, especially to the patients, who have recovered in from two to seven

days, and paid me from one to three visits, is the following: ℞.Resorcin, 3 j; acid. boracic, gr. xx; zinci acetatis, gr. ¼-½; aqua distillat., f ʒ iv. M. Of this solution two teaspoonfuls are injected three times daily. The germicides, resorcine and boracic acid, are so slightly astringent that it requires the additional zinc salt to restore capillary tonicity. This injection is quite, or nearly, painless.

In the treatment of the later stage of sub-acute and chronic gonorrhœa, without stricture or granuloma as a complicating factor, I have had the happiest results follow the use of the following injection: ℞. Hydrargyri chloridi corrosivi, gr. ¼—ss; zinci chloridi, gr. ss—j; aqua distillat, ʒ viij. M. Sig.—A tablespoonful to be injected well down the urethra, three times daily.

Corrosive sublimate injections are by no means a recent addition to the list. The rationale of their use, however, is recent. As in this injection for acute cases, the germicidal constituent must be so sparingly used (otherwise it produces great pain and reactive inflammation), that I find it very advisable to combine a more astringent salt, and the chloride of zinc is the one I have selected, for obvious reasons. Without doubt, a mild injection of corrosive sublimate is destined to be *the* injection for sub-acute and chronic gonorrhœa.—*American Medical Digest.*

TURPENTINE IN SKIN DISEASES.

The internal administration of this drug in skin diseases has not been very often recommended, hence it is well that we should know that Dr. H. Radcliffe Crocker (*Practitioner*, March, 1885,) considers that in the turpentines we have remedies that, while not "perfect cures," yet reduce the hyperæmia and place the patient so far on the way to recovery that a short supplementary local treatment easily removes the remains of the lesion.

He has used it in psoriasis, and in eczema. The dose of the oil is from fifteen to thirty minims in emulsion of acacia thrice daily.

For eczema, he restricts its use to those cases in which no defect in the general health can be detected—a small proportion of cases undoubtedly compared to psoriasis, which Hebra called "a disease of the healthy"—but it is just these uncomplicated cases that puzzle us as to what line of treatment is most likely to prove successful, and he thinks turpentine will help us out of the difficulty. With regard to other diseases of the skin, the evidence he can offer at present is only fragmentary, but that is favorable so far as it goes. In a case of pityriasis rubra, Chian turpentine was given in five, increasing to fifteen grain doses, three times a day, and the skin distinctly improved; but the patient, as so often happens in these cases, became so adynamic, not from the drug, but from the natural course of the disease, that other treatment had to be resorted to. Turpentine is a well-known remedy for purpura, but he has no new facts to offer on this point.

The cases in which turpentine is contra-indicated are, in his opinion, the following: children under five years old; all who have unsound kidneys, or irritable bladders; most cases in which dyspepsia is present, though in some instances it can be tolerated even then; and gouty subjects, whose powers of elimination are seldom good.—*Phil. Med. and Surg. Reporter.*

OPIUM IN HÆMOPTYSIS.

A writer in the *Physician and Surgeon* says: "Although a multitude of drugs are recommended, and not a few almost regarded as specifics, it must be admitted that the profession has at command but a few preparations that have unquestioned influence to control pulmonary bleeding. Ergotine and the fluid extract of ergot have been mentioned; oil of turpentine given by mouth or rectum exhibits positive action in hemoptysis of phthisis. But it cannot be too forcibly urged that the most important condition requiring treatment is the terror manifested by the patient, so alarming and distressing to the friends, which in turn tends to further alarm the patient. The administration of opium in some of its forms is clearly indicated to calm the excited brain and reduce the throbbing heart. Give it hypodermically, that its physical effects may be quickly produced. The result is magical. The patient's actions and countenance are speedily calmed, the bleeding stops, the much-needed refreshing sleep is obtained, and the over-estimated danger is averted."

TREATMENT OF ANGINA PECTORIS BY THE IODIDE OF SODIUM.

Angina pectoris, since the days of Gintrac and Lancereaux, has been considered as a cardiac neurosis. Although in many cases a diseased condition of the coronary arteries and the aorta has been found, still the symptoms have been ascribed to a nerve disturbance dependent more or less on the innervation of the heart muscle or upon some degenerative change of the nerve fibres. M. Henry Huchard, from a study of twenty-five post-mortem examinations made at "Hopital Vichart," objects to this view and ascribes the symptoms directly to degenerative changes with obstruction of the coronary arteries. He claims that true angina pectoris is the result of a disease of the arteries and not of the nervous system.

In accordance with this theory he advises remedies which have an effect upon the arterial system. The iodide of sodium is especially recommended given in doses of sixteen to thirty grains daily. He continues this medication during months, and even years, and claims to have given complete relief and to have produced a cure of this dreaded disease in many cases. He thinks that the iodide of sodium probably acts by lower-

ing the blood tension, relieving the walls of the artery and favoring the disappearance of the pathologic exudation. For the relief of the paroxysm he recommends the inhalation of the nitrite of amyl in four to six drop doses.

Although true angina pectoris had been assumed to be a neurosis, the remedies which have been most successfully employed have been those acting upon the arterial system. Occurring as it does at the ages when degenerative changes in the arteries are found and in subjects of such degeneration, it would seem that the theory advanced by Huchard should be carefully considered. That it is generally accompanied by high arterial tension has been already recognized, and the drugs have been most successfully used which reduced this tension. Dr. Lauder Brunton has long since recommended the nitrite of amyl in reducing blood pressure, and we are indebted to Dr. Murrell for our knowledge of the value of nitro-glycerine as a remedy producing the same result. Both remedies have been successfully employed in relieving attacks of angina pectoris, but neither has been able to effect a permanent cure.

That the iodides from their well-known action of lowering the blood-pressure and at the same time favoring the disappearance of pathological exudations may exert a healthy action in the earlier stages cannot be denied, but in cases connected with well developed atheroma more evidence is needed before it can be positively accepted.—*St. Louis Courier of Med.*

THE TREATMENT OF CORPULENCE ON PHYSIOLOGICAL PRINCIPLES.

As analyzed by the Birmingham *Medical Review* (*Detroit Lancet*) Ebstein, in his work on corpulence, gives some practical points for the reduction of obesity.

According to him, fattening is strictly analogous to the fattening of cattle, and depends on overfeeding. He, however, disputes the current view that fat makes fat; on the contrary, he thinks fatty food protects the albumen and prevents its forming fat. His plan of treatment, therefore, consists in moderating the quantity of food, and, while cutting off all vegetable carbo-hydrates, sugar, starch, etc., allowing a moderate quantity of fat, two or three ounces daily, to be taken. He also suggests that the diet should be monotonous, greasy, and succulent, so as to cause satiety rapidly. He disallows beer, but permits light wines.

The plan advocated appears rational, and is free from the objection of Banting's method, which is too much like starvation. The following is the diet used successfully by Ebstein in one of his cases:

Breakfast.—One large cup of black tea—about half a pint—without sugar; two ounces of white bread or brown bread, toasted, with plenty of butter.

Dinner.—Soup, often with marrow, from four to six and one-half ounces of roast or boiled meat, vegetables in moderation, leguminous preferably, and cabbages. Turnips were almost, and potatoes altogether, excluded. After dinner a little fresh fruit. For second course, a salad, or stewed fruit without sugar. Two or three glasses of light wine, and immediately after dinner a large cup of tea, without milk or sugar.

Supper.—A large cup of black tea, as before. An egg, a little fat roast meat, or both, or some ham with its fat, bologna sausage, bread well buttered, occasionally a small quantity of cheese, and some fresh fruit.

On this diet the patient lost twenty pounds in six months.

Ebstein insists on the necessity of always keeping to the restricted diet if the tendency to corpulence is to be successfully combated.

GLYCERINE IN GASTRIC DISTURBANCES.

BY C. C. P. SILVA, M.D.

Glycerine, by virtue of its soothing effects on the internal integument, and also by its anti-acid and antiseptic properties, is an agent of the highest value in the therapeutics of some gastric affections.

When, through some cause, either owing to the digestive apparatus, or to the ingesta, the digestion becomes painful, tardy, laborious, and imperfect, there is always present in the cavity of the stomach or that of the intestines, a more or less developed fermentation with the necessary consequence, accumulation of gas, acid or otherwise.

This, which takes place in the adult very frequently, owing to the bad habit, principally among business men, to admit into the stomach aliments improperly masticated, happens with the infant still oftener, because of greediness on their part, or in consequence of inadequate alimentation or faulty hygienical surroundings. In glycerine we find a very useful medicament to inhibit fermentation, generation of gas and also to soothe the irritability of the gastro-intestinal mucous surfaces. This, of course, is only a palliative treatment, but not in the least to be neglected, for it relieves immense suffering, meanwhile, we correct the primitive cause of the dyspeptic or apectic disturbance, by slow and perfect mastication of all ingesta, discarding of any aliment which experience (personal or otherwise) shows to disagree, regularity in taking meals and adaptability in its quantity and quality, to the requirements of the organism, in general, and of the stomach, in particular. The observance of sound hygienical precepts is not a less important factor of success. The dose of glycerine, for adults, is a teaspoonful, in water, before or after meals, and for children, from ten drops to half a teaspoonful, according to age.

THE THERAPEUTIC VALUE OF ARSENIC IN ANÆMIA AND ATROPHIC CONDITIONS.

Dr. Samuel Wilkes, in the *Lancet*, writes strongly in favor of arsenic in many diseases where skepticism as to its use on the part of a large portion of the profession has generally prevailed. There can be no doubt that many of the cutaneous affections cured by arsenic have a gouty origin, and therefore it is not surprising that the same remedy has a great power in preventing attacks of gout. Then this gouty class of persons are often neuralgic, and it may be in them especially that arsenic is the best nervine remedy. He has found it amongst the most efficacious medicines, and in some cases the only remedy. Thus, before the introduction of nitrite of amyl and glonoine for angina pectoris, he relied mainly on arsenic, and in some cases kept off attacks for weeks where they had previously occurred almost daily. But the most remarkable effects of this remedy are seen in anæmia and various forms of cachexia and atrophy. One case which he cites was a lady about forty years of age who was pronounced to be the subject of idiopathic anæmia. Her bloodless and feeble condition compelled her to keep her bed, and it was never believed that she would rise from it again. Arsenic was used, she soon began to improve, and in a few weeks was able to visit her doctor at his house. Her husband was not surprised at the action of the remedy, for, as he said, if he had a horse which was not "thrifty" he gave it arsenic, rendering it again plump and glossy. Another case of the so-called pernicious anæmia was in a gentleman who had gradually grown anæmic and breathless,so as to be unable to leave his house, and he walked with much difficulty. He took five drops of liquor arsenicalis, and in a month he was comparatively well. In most of the cases where arsenic has succeeded, iron had previously failed. It is,however, in wasting and general cachexia that Dr. Wilkes has been the most pleased with its action. He details several cases where there were evidences of extreme wasting and debility, attributable to no special disease, and where arsenic effected cures.

He has never given very large doses, generally four or five drops of the liquors arsenicalis three times a day, or a little more of the soda preparation; nor has he observed any injurious effects from its long use, although,as is known, it becomes absorbed into the system, the urine showing its presence many weeks after its administration has ceased.

An editorial on this article, in the same number of the *Lancet*, considers Dr. Wilkes' testimony as of great value, as coming from one who is far too much imbued with scientific caution to lavish undeserved credit on any pharmacopœial preparation. The testimony of Dr. Wilkes on its efficacy in idiopathic anæmia is borne out by the experience of many physicians; among the most recent being Dr. Warfinge, of Stockholm, who reported several cases of remarkably rapid arrest of the downward progress of the disease, and even of recovery, under the use of arsenic. All such cases should, however, be subjected to prolonged supervision, as it is notorious that relapses are prone to occur. The same remedy has been also successfully employed in an even more definite cachexia—viz.: Hodgkins' disease, where the administration of arsenic has been supplemented by its injection into the hyperplastic lymphatic glands, with, according to Winiwarter, astonishing results

BELLADONNA INJECTION FOR GONORRHŒA.

Some thirteen years ago, an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa, with intense pain on micturition, and intolerable chordee at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grains extract belladonna, ten grains powdered opium, as a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning, having had no chordee that night, and the pain of micturition disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordee at night. With the application of the belladonna and opium ointment the chordee did not appear, and in four days after using the injection the running ceased, but after the first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always started that it is the injection, and not the ointment, which stopped the chordee. I have tried the anodyne treatment in various classes of people,from the dissipated paupers of the Eastern bazaars to the well fed *roue* in the West; in the acute and in the chronic and gleety stages; in first attacks and in those making one of a series; and in cases complicated with inflamed testicles and chordee; and I have no hesitation in saying that I have not witnessed anything to contra-indicate it nor to mitigate its success.—*Medical Press.*

BOROGLYCERIDE IN PSORIASIS.

Dr. Chas. Roberts in an irritable and obstinate case of psoriasis, used boroglyceride locally with very gratifying results,and has since used it in other cases with the same effect.—*Brit. Med. Journal.*

IODOFORM COLLODION IN NEURALGIAS.

Dr. William Browning, of Brooklyn, in the October number of *The American Journal of the Medical Sciences*, gives his experience with this remedy for external application, together with notes on the preparation itself, and a brief study of its action. The strength usually employed is one part of iodoform to fifteen of collodion. A half-ounce is usually sufficient for any ordinary single application. Dr. Browning has found it most effective when painted on in very thick layers, which may be conveniently done with the usual camel's hair brush. As soon as one coating becomes a little firm another is applied, and so on until it appears to have an average thickness of half a millimetre. In the neuralgic cases as a cure, when effected, was usually accomplished with one or two applications.

The class of troubles found most amenable to this treatment was narrowly localized neuralgias, especially when corresponding to some particular nerve and not dependent on any demonstrable lesion. In fact, if a neuralgia, or what is thought to be one, proves intractable to this means, we should doubt its being a purely functional affection, and look carefully for some tangible cause. It has thus a certain diagnostic, as well as a therapeutic, value. Several times its complete or partial failure has led to a more searching and successful examination. Even in such cases much temporary relief is often afforded.

Supraorbital neuralgias, even of malarial origin, particularly if the miasmatic infection dates back some time, seems quite amenable to this treatment, Of course it is not recommended as a substitute for quinine here, but only as an adjuvant where the latter fails or acts too slowly.

THE SURGICAL TREATMENT OF GALL STONES.

Mr. Lawson Tait thus writes in the *Lancet*, September 5, 1885:

I have now performed the operation sixteen times, with uniform success, whilst the variations from the proceeding I am about to describe have been disastrous to the extent, in the hands of others of between fifty and sixty per cent.

Having felt the position of the hepatic notch, I make an incision from the margin of the ribs over it directly, or almost directly, downwards, cutting carefully through the various textures until I reach the peritoneum. This is carefully seized by two pairs of forceps and pulled backwards, an opening having been made between the two pairs of forceps large enough to introduce my forefinger. With this I search for the gall-bladder; and sometimes I have experienced considerable difficulty in finding it. Generally speaking, the stones can be felt in the bladder before it is opened. In two cases out of the sixteen I have not found any gall-stones; in one case a mistake had been made, and in the other the disease was in all probability malignant. Having found the gall-bladder, I cautiously bring its fundus towards the wound and seize it by a pair of forceps. If it is distended, it is first of all tapped and emptied; if it is not distended, or if it had been emptied, I lay it open by scissors or forceps to an extent sufficient to get a finger in; the edges of the wound in it are then seized by forceps, and any bleeding points secured. My finger then explores the bladder, and by means of forceps or scoop all the stones within reach are removed. A continuous suture is then applied so as to accurately close the peritoneum by uniting the edges of the wound of the abdominal wall to the edges of the wound of the gall-bladder, the two peritoneal surfaces being carefully adapted to each other. An India-rubber drainage-tube is then placed in the wound, and this is kept in for six or seven days, until it is possible to remove the stitches. If the stiches are removed along with the drainage-tube, the wound speedily heals; and if all the stones have been removed, the patient is already cured. If the wound reopens and bile discharges, or mucus from the gall-bladder, the remaining stone which occludes the passage must be dealt with, either by crushing from the outside of the duct or in some other way, as circumstances or the ingenuity of the operator may suggest. I certainly vouch for this that, so far as my cases have gone, it is not known that they have any tendency to the reproduction of the gall stones. Certainly they have not given any indication of it so far. I would point out that even if this did happen, an incision through the skin, probably only half an inch deep over the site of the old scar, would reach the gall-bladder without opening the peritoneum at all, and any reaccumulation of gall stones might be removed without the slightest difficulty or danger. I need not point out that in the event of the operation being performed which is suggested—namely, cholecystectomy—after an accumulation occurred in a case of numerous gall-stones, as actually did occur to myself where a small gall-stone lodged beyond the junction of the hepatic and cystic ducts, the operation in which the gall-bladder was removed would be, of necessity, fatal, because all the secretion of bile would find its way into the peritoneum. The detailed results of this operation of cholecystectomy have not been published, and what I know of them is only by hearsay, but I have a strong suspicion that the deaths in two of the cases are to be attributed absolutely to this cause. At any rate, the mortality of cholecystectomy is fifty per cent.; the mortality of cholecystotomy has not yet appeared.

USEFUL INHALANT.

At the Throat Hospital, London, the following is much used as an inhalant: Oil of Scotch pine (fir), 2 fluid drachms; carbonate of magnesia, 1 drachm; water, sufficient to make 3 ounces. A teaspoonful is put in 1 pint of water at 150° F., and used at each inhalation.

THE USE OF CARBONATE OF AMMONIA IN CEREBRAL HEMORRHAGE, THROMBOSIS, AND EMBOLISM.

Dr. R. C. Van Wyck thus concludes an article in *Gaillard's Medical Journal* for August:

The advantages I claim for the carbonates of ammonia in the treatment of cerebral hemorrhage, thrombosis, and embolism are as follows:

1. As a diffusible stimulant to the general circulation, relieving the anæmia which is present in the brain, increasing the cutaneous circulation, and inducing perspiration—relieving in this way intercranial pressure.

2. By its direct action in dissolving the clot. The only agents which possess this property are the alkalies, and the most effective of these is ammonia.

3. In œdema and congestion of the lungs, so often seen in apoplexy, the use of this salt will often relieve the existing condition, partly by its stimulating action on the terminal capillaries, and also by its expectorant action on the bronchomucous membrane.

4. By keeping up the alkalinity of the blood, and preventing further thrombosis.

I do not claim this drug as a specific, but only an auxiliary to other remedies. In the treatment of a case of cerebral hemorrhage, the following would seem to me the order of treatment:

1. The prodromal symptoms which threaten an attack of apoplexy, by prompt venesection and catharsis.

2. To relieve the period of reaction after paralysis has taken place by arterial sedatives, preferably aconite.

3. To remove the exudation and all retrograde changes in the clot, anæmia, pulmonary congestion, and further thrombosis, by the free use of carbonate of ammonia.

4. To support the system by nourishing yet unstimulating diet, and by the use of medicines which nourish the brain tissue, such as syr. lactophosphate of lime, cod-liver oil, and the phosphide of zinc.

5. To increase the muscular development by massage-frictions, electricity, and strychnia.

The carbonate of ammonia should never be given in cerebral hemorrhage until the period of reaction has fully taken place, say from ten days to two weeks.

It should then be given continually for at least a month or more, or until the retrograde changes in the clot are accomplished.

In thrombosis and embolism if the diagnosis can be clearly made it should be given at once.

The dose used was 5 grs. three times daily in ʒ ss. of the solution liquor ammoniæ acetatis.

There is one class of cases in which the carbonate of ammonia has not acted well in my hands, viz., cerebral hemorrhage associated with interstitial nephritis and hepatitis. In these cases I have had good results from the phosphate of sodium, 20 to 30 grs. three times daily, in the infusion of dandelion given after meals, and small doses of corrosive sublimate, 1-24 gr. three times daily before each meal. I have sometimes combined it in a pill with digitalis and squill.

MEMBRANOUS CROUP; DIPHTHERITIC CROUP; TRUE CROUP.

The April number of *The American Journal of the Medical Sciences* contains an elaborate clinical study of true croup, from the pen of Dr. J. Lewis Smith, of New York. He fully considers the etiology, anatomical characters, diagnosis, prognosis and treatment. What ever the cause, the anatomical characters, the clinical history, and the required treatment, are so nearly identical that attempts to differentiate the disease when produced by other agencies than diphtheria from that due to diphtheria, have proved futile and unsatisfactory in localities where diphtheria occurs except in a few instances, as, for example, when croup has been manifestly caused by swallowing or inhaling some irritating agent.

Dr. Smith holds that inflammation of the laryngeal and tracheal surface, whatever its cause, whenever it reaches a certain grade of severity, may be attended by the exudation of fibrin and the formation of a pseudo-membrane; but such a result more frequently occurs in the inflammation caused by diphtheria than in that produced by other agencies. In diphtheria a moderate laryngotracheitis is attended by the pseudo-membranous formation. Dr. Smith's experience leads him to believe that not more than one in eight cases of croup has recovered by medicinal treatment which began in the first week of diphtheria, and in which the symptoms were so pronounced as to indicate more or less laryngeal stenosis. The exudation in the first week of diphtheria, or in its active period, occurs so rapidly, and in such large quantity, that no one of the medicinal agents or modes of treatment, which physicians commonly prescribe, is sufficiently prompt in its action to prevent the formation of the pseudo-membrane to an extent that soon endangers life.

Croup occurring in the second or third week of diphtheria, since it is attended by less abundant and less rapid exudation than when it occurs during the acute stage, can be more successfully treated under the persevering use of solvent inhalations, and a larger proportion than one in eight, perhaps one in there, recovers by the early and continuous or almost continuous use of inhalations.

Still the mortality is so large, and the suffering so great in croup, at whatever stage of diphtheria it occurs, that we cannot rely on the slow action of medicines or inhalations, and surgical treatment is in most instances required to diminish the suffering and afford the best chances for saving life.

Under the head of medicinal treatment, he strongly recommends trypsine as a solvent of false membrane. Of calomel, he says: The experience of many physicians justifies the belief that mercury, and especially calomel, employed within certain limits in the commencement of a pseudo-membranous inflammation does exert some controlling action on this disease. That it did much harm formerly when physicians prescribed it as freely as we now employ potassium chlorate, to the extent in many instances of increasing the cachexia and causing mercurialism should not deter us from its judicious use. In the ordinary form of diphtheria he would not advise the use of calomel, or would limit its employment to one or two doses of six to ten grains in the commencement of the disease in robust cases. But in croup, since the danger is not from the cachexia or blood-poisoning so much as from the laryngeal stenosis, which is apt to develop rapidly, that medicine is indicated, and should be prescribed, which most strongly retards the exudative process, and aids in liquifying and removing the pseudo-membrane, provided that it produce no deleterious effect which renders its use inadmissible. Hence it is proper to prescribe calomel in larger doses and for a longer time in the treatment of croup than in other forms of membranous inflammation, if it fulfil the indication as it seems to in a measure. In his own practice, however, calomel is not prescribed after the first or second day, since Dr. Smith prefers the use of other remedial measures, which are efficient, and are less likely to produce injurious effects. The subject of surgical treatment is also fully discussed, and Dr. Smith holds that we can claim for tracheotomy judiciously performed, and at a sufficiently early stage, the cure of one in every three patients on the average.

THE RECTUM.

We are glad to see a more or less general disposition to give that patient and long suffering organ, the uterus, a much-needed rest. Attention of late seems concentrating on its next-door neighbor, the rectum.

Many of our exchanges are devoting a large amount of space to a discussion of rectal diseases and normal and abnormal rectal conditions. Rectal reflexes have all of a sudden been found to be of almost universal prevalence. If a lawyer gets the heartburn, or a minister weakens in the preparation of his Sunday sermon, the probability is that there is something wrong with his rectum.

A late number of one of our exchanges contained four articles by as many different writers, besides an editorial, all calling attention to the rectum; and then it was plain to be seen that only the vestibule of the subject had been entered, as it were. A prominent surgeon of this city has not only *fringed* it, but pocketed it, and, in his enthusiasm, he seems to be conscienceless, and to want to walk off with the universal rectum without a show of compunction.

Whether the rectum will stand as much steady and unremitting abuse as the uterus has done in the last fifty years, is a question.

It bids fair, however, to be a bigger bonanza to the doctors than ever the womb has been. It appertains to both sexes and all ages. From the great-grandfather to the neonatus, the rectum offers itself for inspection and treatment. And the beauty of it is, it suits all tastes in its tolerance of attention. The surgeon can cut it, tear it, cauterize it; blister and burn it; he can expand it, contract it, pinch it and pucker it; plug it and unplug it. The barber can barber it; the leecher can leech it; even the midwife can anoint it, syringe it and empty it.

The doctor can doctor it in any way he please s It takes big doses with composure and little doses with a quick response.

It is susceptible of medication both directly and indirectly, and it is a portion of the economy so universally necessary to the comfort, health and life of every single member of the human family that in its possibilities, there is, so to speak, no end to it.

However it may be treated, whether by expert or neophite; it is senseless, earless, eyeless. However much the viscus may be damaged, in the course of its experiences. its hapless owner can't see it and be a reliable witness to malpractice in a court of justice. He can't by sight count its scars, measure in inches the depth of his sphinctral misery. Any error in diagnosis or failure in treatment, while necessarily fundamental and possibly serious in its consequences, is easily covered up for, with a little alum or tannin properly applied, so far as giving anything away is concerned, the rectum may be rendered as "tight as a drum."

The failure, should it occur, may be attributed to a "cold," or to some indiscretion in diet, or to atmospheric or telluric disturbances, to all of which the rectum is highly sensitive.

A sudden and unforeseen onset of microbes may upset the calculations and predictions of the most skilful and astute physician and render negative his best endeavors.

To the coming doctor the rectum presents an opening compared to which a malposed womb or dislocated ovary is nothing worth a thought.

In a word, the womb of the future is pregnancy with golden possibilities regarding the rectum.—*The Medical Era.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, 1 ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

HOW TO DIAGNOSE GONORRHŒA IN THE FEMALE.

The difficulty of differentiating a specific vaginitis from a simple or catarrhal inflammation of the vagina, has probably worried most of our readers. A mistake in diagnosis in these cases is also a matter of very considerable importance. The happiness of a home may hang on the issue. It becomes the physician in such a case to hew the line, let the chips fall where they may; but he must be particularly careful that none of them fall on his own toes. There has, up to the present time, been no pathognomonic sign which might serve as a guide in such a perplexity. At a recent meeting of the Paris Obstetrical and Gynæcological Society, however, Martineau suggested one which may answer the purpose. The pus of the specific vaginitis is said to be always acid, while in the simple variety it is alkaline. A little piece of litmus paper, therefore, will tell the story. The importance of this discovery cannot well be over-estimated. Both on account of social and medico-legal reasons, its importance is very great.—*Medical Age.*

INSTRUCTIONS CONCERNING THE MANAGEMENT OF DIPHTHERIA.

According to the *Journal de Médecine de Paris* (*Archives of Pediatrics*) the Council of Public Health of Paris offers the following concerning measures which should be taken for the treatment of diphtheria:

General Instructions.—Diphtheria is a disease which is markedly contagious. All intercourse of children with diphtheritic patients should be avoided. There is no substance known which will surely prevent diphtheria. It is very important to carefully watch the beginning of every throat trouble. It is necessary to nourish children to the highest available point, especially in time of an epidemic, and not to subject them to the prolonged action of a moist low temperature.

Precautions when diphtheria appears in a family:

1. It is indispensable that every one should be separated from the patient, who is not concerned in caring for him. This applies in particular to the other children.

2. Those who are engaged in caring for the patient must avoid embracing him, inhaling his breath, and being very near him during paroxysms of coughing. If the attendants have any small wounds upon any portion of the body which is liable to come in contact with the patient, they must be particular to keep them well covered with collodion. They should take pains to keep up their nutrition, and go out several times daily into the open air. The hands and face should be frequently washed in a weak solution of boric or thymic acid.

3. The health authorities should be promptly notified at the first appearance of the disease.

Measures of disinfection: 1. Substances which have been expectorated or vomited should be disinfected with a solution consisting of fifty grams of chloride of zinc, or sulphate of copper, to a liter of water. Linen, and all clothing soiled by the patient, should be immediately soaked in one of these solutions, and then placed in boiling water and kept there for at least an hour. All vessels and utensils which have been used about the patient should also be immersed in boiling water, immediately after they have been used.

Whatever be the issue of the disease, the sick-room must be thoroughly disinfected. The operation may be done as follows: All openings into the room having been closed, a pan containing sand may be placed on the floor in the middle of the room; upon this some burning coals may be laid, and upon the coals a quantity of sulphur, varying with the size of the room, may be ignited. (Twenty grams of sulphur to the cubic meter would be sufficient.) The room should remain closed for twenty-four hours, and then it may be freely ventilated. All the clothing, linen, and coverings, which have been used in the sick-room must be thoroughly disinfected with one of the solutions referred to. The mattresses should be opened and left in the room during the process of fumigation.

REPORT OF A CASE OF NASO-PHARYNGEAL CATARRH.

Mrs. C.——, age 45, presented herself at my office, for treatment for catarrh of naso-pharynx. On examination of anterior nares, the walls of nasal cavities were found almost entirely covered with incrusted secretion. Posterior rhinal examination revealed the same condition, differing in the latter, only the incrustations were thicker and more extensive, from the fact that a more capacious chamber existed for their formation; the incrustations were not observed to extend below the superior margin of vellum; it is needless to state, in this case, the odor was stifling and sufficient to impregnate the air of the room in a very short time. Having removed the incrustations, I found the mucous membrane of the naso-pharynx a deep red or rather a livid hue, with several points of abrasion in the mucous membrane; the tissues, both soft and hard, were atrophied to a great degree; the nasal cavities were increased to three or four times the size of normal lumen; the cavity of the vault of pharynx was immensely enlarged; her health, of course, was much reduced from this exhaustive inflammation, which had continued to a greater or less extent for twenty-five years. She complained of cephalagia, neuralgia, rheumatism, indigestion, constipation, palpitation, and a number of other minor symptoms or sequences of catarrh. With the existence of these unfavorable conditions, she began treatment.

Through cleansing of the diseased mucous membrane was instituted;— this cleansing was

performed in the mildest manner possible, compatible with entire success in the removal of all secretion. The detergent used was sodium chloride, water and listerine, sprayed by the use of compressed air, rather forcibly, until the crusts were loosened or removed; then mildly until the surface was entirely free of all secretion. In case the tenacious purulent matter cannot be removed by the spray, a bit of absorbent cotton on a probe, gently applied, will accomplish the desired result.

After thorough cleansing, the diseased membrane was covered with a coating of vaseline in which was intimately mixed a little oil eucalyptus and resorcin. This treatment was applied daily for three weeks, then every other day for two weeks, then twice a week for a while, then once a week for some time; during the interval between visits to my office she was instructed to use as a home treatment, daily, the detergent solution, given above and fluid cosmoline. The constitutional treatment consisted of tonics and aperients with corrections in dietetic errors. Under this treatment the patient rapidly improved, and at present writing, which is eighteen months after treatment began, her breath is inoffensive, hard crusts have ceased to form, and the mucous membrane has become notably thicker; though not perfectly well, the case has been improved. her general health greatly restored, and she is able to take her place in society from which she was ostracised. In conclusion, we wish to state that the above is one of those cases which are generally regarded as incurable, and doubtless an absolute cure is impossible, but the degree of palliation and improvement is so great that it is well worth the treatment.—*N. R. Gordon, M.D., Springfield, Ill.*

INCONTINENCE OF URINE IN CHILDREN.

The *Medical* World thus abstracts Eustace Smith:

"Of medicines which diminish irritability, belladona takes the first place, but it is important to be aware that this remedy, to be effectual, must be given in full doses. Children have a very remarkable tolerance for belladonna, and will often take it in surprising quantities before any of the physiological effects of the drug can be produced. In obstinate cases of enuresis the medicine should be pushed so as to produce dilatation of the pupils, with slight dryness of the throat. In children of four or five years of age, it is best to begin with twenty-five or thirty drops of the tincture of belladonna, given three times in the day, and to increase the dose by five drops every second or third day, of course watching the effect. Ergot is another remedy which is often very successful. For a child of the same age, twenty drops of the fluid extract may be given several times in the day.

Bromide of potassium, benzoic acid (dose five to ten grains) and benzoate of ammonia, digitalis, borax, cantharides, camphor and chloral have all been recommended as specifics in this complaint. Sometimes a combination of several drugs seems to be more effectual than one given alone. I have lately cured a little girl, aged four years, who had resisted all other treatment, with the following draught given three times in the day:

℞ Tinct. belladonna,..... gtts. j,
Potas. brom.,..... grs. x,
Infus. digitalis,..... ʒij,
Aquam ad..... ℥ss.
M. Ft haustus.

When the incontinence continues in the day as well as at night, strychnia should be combined with the sedative, so as to give tone to the feeble sphincter. In these cases, too, cauterization of the neck of the bladder, with a strong solution of the nitrate of silver (℈j—ʒ j. to the ounce of water) has been found successful."

PILOCARPINE IN CROUP.

By John H. Ownings, M.D., of Deer Lodge, Mont.

December 16, 1883, I was called at 4 p. m. to see Lauretta, age 4 years, daughter of J. McA. On arriving found pulse quickened, hoarse whispering voice, short ringing metallic cough, and stridulous respiration. Upon examination of fauces, found a fibrinous patch on the right tonsil about the size of a large grain of wheat. Respiration 36. Tongue moist, but covered with a yellowish white fur. I learned that she had awakened about 2 a. m. with croup coughous and that she had had an attack of croup one week before, which had been relieved by vomiting with syrup ipecac and lobelia, but had had no return of the trouble until this a. m. Cave turpeth mineral, gr. 3, and after vomiting freely ordered calomel, ½ gr.; pulv. ipecac, ¼ gr., to be given every hour, with hot fomentations to neck.

9. p. m. Patient much the same. Gave pulv. alum, 1 dr., which was followed by copious vomiting. Hot fomentations and muriate and ipecac continued, promising to call in morning.

7 a. m., 17th. Patient growing worse. Rough hissing or crowing sound both on inspiration and expiration.

Gave turpeth mineral, gr. 5, and ordered tr. verat. viride in ½ drop doses with potassium bromide, gr. 10, every hour, hot fomentations continued, muriate and ipecac discontinued.

11 a. m. No perceptible change.

4 p. m. Stridulous respiration, increasing loss of voice. Gave turpeth mineral, 5 grs., which was followed by scanty emesis. Ordered patient to be kept enveloped in steam from slacking lime, and to give:

℞. Tr. eucalyptus, ʒ v.
Mur. pilocarpine, gr. ½
Vin. pepsin. ʒ j.
Syrup tolut. q.s. ad ℥ iv.

Sig.—Give a teaspoonful every half-hour.

8 p. m. Called Dr. M. in consultation, for the purpose of performing tracheotomy. Breathing somewhat easier. Gave 3 grs. turpeth mineral, which was followed by vomiting of a large quantity of mucus with shreds of fibrinous membrane. Ordered treatment continued, promising to return in a few hours.

2 a. m., 18th. Breathing great deal better. During last act of vomiting a large quantity of membrane came away, and is now expectorating a good deal of tough, yellowish fibrin, with frothy sputa.

6 a. m. Crowing cough gone, breathing easy, has been taking beef tea and wine. Ordered eucalyptus and pilocarpin to be given every hour, with generous doses of wine and beef tea.

4 p. m. Patient still improving : breathing natural.

19th, 10 a. m. Patient quite bright : has taken some solid food ; cannot speak out loud ; has had action of bowels, but urine very scanty. Ordered nitre, juniper, and digitalis, and the eucalyptus and pilocarpin stopped.

21st. Patient convalescent, and visits discontinued.

26th, 2 p. m. Called again to see this little patient, and found a return of disease, with all its horrors. Resumed eucalyptus and pilocarpin, giving it every hour, and directed that three grains turpeth mineral be given every four hours, with lime steam and hot fomentations.

9. p. m. With every act of vomiting shreds of membrane are given off, tinged with blood.

27th, 9 a. m. Patient better. Treatment continued, lengthening the interval between the doses of eucalyptus and pilocarpin to two hours.

28th. Patient still improving. Eucalyptus mixture every four hours, and the diuretic given three times a day.

30th. Patient convalescent.

Since the date of the foregoing case I have had three others, and treated them the same. Two recovered, one died ; the latter, some twelve miles from town, I visited twice, and in view of the poor nursing the child received, do not think the treatment had a fair chance.

I have also used the eucalyptus and pilocarpin in fifteen cases of diphtheria, with only two deaths. Tincture iron and quinine, with whisky, were given freely, but I am inclined to think that to eucalyptus and pilocarpin I owe my success in this disease. I have used pilocarpin freely in follicular tonsillitis with the best of results, and mention these facts for the purpose of calling the attention of the profession to them, believing that, if properly used, they will not disappoint.

Dr. T. Gaillard Thomas gives it as his opinion that the diagnosis of pregnancy at any time less than three months from its inception is an impossibility, and insists that this fact remembered in examining a woman whose menses have stopped, would guard the physician against error.

THE CONTAGIOUS SKIN DISEASES.

Dr. Arthur Van Harlingen very particularly remarks, in the *Polyclinic*, that one of the first questions which occurs in the study of skin diseases, and usually the first one which the patient puts to the physician is, " is this disease contagious ?" It is a question that ought to be answered at once, and as the number of the contagious skin troubles is small, they ought to be thoroughly studied in order that the patient may be given the proper answer to his question unhesitatingly. The dermatic affections which are contagious are all of the syphiladermata, although to a greater or lesser degree. Then we have scabies, the various forms of pediculosis, ringworms, parasitic sycosis, favus, tinea versicolor, impetigo contagiosa, molluscum epitheliale (m. contagiosum), and some of the rarer troubles, such as farcy. If, as is asserted by a number of good authorities, lupus, lepra and other affections depend upon specific bacilli they are, to a greater or lesser degree, contagious also, and might be included in such a list. The supposition of such a quality at all events would do no more than diminish the danger of such an accident occurring, and could do no possible harm.—*St. Louis Med. Jour.*

NITRO-GLYCERINE, NITRITE OF AMYL AND NITRITE OF SODIUM IN CARDIAC AND RENAL DISEASES.

Nitro-glycerine and nitrite of amyl have for some time been extolled in the treatment of mitral and aortic diseases, and also in granulated kidney. In a great number of cases these agents act very efficiently, relieving and dispelling some of the most alarming and conspicuous symptoms, such as chæmicranea, the array of phenomena which haracterize a paroxysm of angina pectoris, and also many of the phenomena which indicated the presence of uremic poison. As these affections are manifested by more or less cardiac weakness and high arterial tension, the modus operandi of these medicaments consists in energising the heart's action and lowering the blood-pressure, this wise relieving anæmia and venous stasis,aiding, thereby, the elimination of effete matter through the renal excretions.

Nitro-glycerine, which may be administered either in solution one per cent, or in pill form, has the great disadvantage of being uncertain in its action. Sometimes, one single drop or one pill produces very severe phenomena, referable to the head ; others, a dose tenfold larger receives no response from the system. Nitrite of amyl possesses not the inconveniences of nitro-glycerine ; is of easier and readier administration (from 5 to 10 drops by inhalation), but its action is transient and ephemerous. It is adaptable to cases of great emergency, as the advanced guard of other potent agents, which require longer time to provoke their physiological action.

Nitrite of sodium is calculated to supersede the other medicaments, It is odorless and without

aste, freely soluble in water, and, in the dose of one grain, three times a day, is an efficient medicament, in the same pathologic conditions wherein nitro-glycerine and nitrite of amyl find indications.

Cerebral phenomena and others referable to the nervous system, when induced by this agent, are of a mild and transitory character, and the benefits derived from it are lasting and manifested a few hours after the initial dose, if it meets with a favorable response from the organism.

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie (*N. Y. Med. Jour.*), of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken.

Dr Wylie states that sick-headache, as such, is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*Detroit Lancet.*

TREATMENT OF ECZEMA.

Henry J. Reynolds, M.D., Prof. of Dermatology in the College of Physicians and Surgeons of Chicago, read a paper on this subject at the Illinois State Medical Society.

Therapeutically speaking, he regards the disease as always either acute, sub-acute, or chronic, regardless of its clinical name or location, and arranges the treatment accordingly. In the acute, as in all other acute inflammations, the great principle necessarily involved is *rest*, which implies not only quietude of the member or part, but *rest from all irritating influences.* Soothing and protecting measures, therefore, are indicated in this stage, among which may be mentioned carron oil, poultices, etc. In the sub-acute as in all other stages and forms, scratching must be strictly prohibited, as it is the most fruitful of all sources of aggravation.

He uses in this and the chronic condition (either of which may at any time develop acute symptoms and require the treatment changed accordingly) pure, impalpably fine boracic acid as a dusting powder; having first gotten rid of crusts and scales by soaking with oil and washing with soap and warm water. In the chronic, however, he uses greater stimulating measures, in the way of green soap frequently rubbed in during washing. He thinks bandaging and strapping advisable whenever practicable, prefers the cotton roller to the rubber, where there is much exudation or maceration of the skin. He has but little faith in the popular skin remedy, arsenic, in this or any other disease; all he knows *positively* of the remedy is that you *can* do harm with it. Chrysarobin, internally, as recommended by Stocquart, he has tried without any benetfi.—*St. Louis Med. Jour.*

THE CANADA MEDICAL RECORD
A Monthly Journal of Medicine and Surgery.
EDITORS:
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All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, DECEMBER, 1885.

THE LATE DR. MARSDEN, QUEBEC.

The sudden and unexpected death of Dr. Marsden, of Quebec, which took place on the morning of the 16th of December, has cast a deep gloom over the city where he has so long resided, and among the profession of the two older Provinces of the Dominion, by whom he was well known and appreciated. Although advanced in years, it seemed to his friends that he preserved the keenness of intellect and activity of body of a man twenty years his junior. For the two months preceding his death Dr. Marsden, once every week, travelled to Montreal to take part in the deliberations of the Provincial Board of Health, of which he was a member. The writer of these lines sat with him on this Board, and when, at the meeting held on the 15th of December he complained to him of feeling so unwell as to be obliged to leave before the sitting was closed, he little thought, as he shook hands with him, that his end was so near. Accompanied by one of his colleagues on the Board, Dr. C. E. Lemieux of Quebec, he took the night train home. During the night he grew rapidly worse, and, had it not been for the constant attention of Dr. Lemieux, he would have died before reaching Quebec. He was alive, however, when the train reached there, and very gently removed to his home, where, in the presence of his aged wife, he quietly passed to his rest. The death of Dr. Marsden was a typical close to an active life, and to a certain extent he fell a victim to a cause—that of the public health—to which he devoted a large part of his life. To a person of his years a weekly journey at this season of the year to Montreal was no small undertaking, and it was in consequence of a cold caught in the sleeping car that pulmonic congestion came on and terminated a valuable life.

Dr. Marsden was born at Bolton, Lancashire, England, on February 18th, 1807, and came to

Quebec in 1812, where he has since resided. He was educated at the Royal Grammar School there, and completed his medical education in London and Paris. He had been a medical examiner for more than thirty years, and ranked high as a medical jurist and consulting physician. Before the incorporation of the Quebec Medical School and Laval University, he for many years delivered, with great success, courses of lectures on Anatomy and Physiology, Surgery, Materia Medica and Botany. Dr. Marsden largely contributed to the medical press of the Dominion. From 1827 up to recently his pen has been devoted to science and literature, poetry and prose. In medicine and surgery he has written much for the London *Lancet* and for our Canadian Medical Journals. From 1851 to 1854 Dr. Marsden took a large share in the editorial management of the Quebec *Mercury*, writing on the question of public health and quarantine. He published a complete history of Asiatic Cholera, its etiology and pathology commencing with its outbreak in India in 1817. He was an ex-president of the College of Physicians and Surgeons of the Province of Quebec, of whichhe was senior Governor. He was also an Honorary Fellow of the Medical Botanical Society of London, a Corresponding Fellow of the Medical Society of London, an Honorary Fellow of the Lyceum of Natural History, and of various other learned bodies and societies, and had the degree of M. A. conferred upon him by Bishop's College, Lennoxville.

He had been President of the Quebec Medical Society and also of the Canadian Medical Association, of which he was one of the principal founders. He was assessor of the College of Physicians and Surgeons at Laval University.

There are few citizens of Quebec who will be more missed than the deceased, as he took a very active interest in all that concerned her welfare for about half a century. Whether in civic affairs, in the affairs of the Church of England, of which he was a devoted member, of our charitable institutions, or those connected with his profession, he was always prominent and zealous. At the time of his death, Dr. Marsden was chairman of the Commission of the Marine Hospital, and he was lately indefatigable in his efforts to prevent the small-pox scourge from visiting that city as he was formerly in his doing his best to quarantine cholera. The life just ended was mainly spent in the prevention and alleviation of the ills of his fellow-creatures. Ripe in years he descends to the grave, esteemed and regretted by all who enjoyed his acquaintance, leaving the beloved partner of his life for more than fifty years to mourn her irreparable loss; and to her we extend our most heartfelt sympathy and condolence.

LOCAL AND GENERAL.

St. Cunegonde still retains the unenviable notoriety that attaches itself to a community careless of small-pox. It remains to be seen whether the Central Board of Health and the Civic Board possess between them sufficient backbone to insist upon proper sanitary measures being carried out. In the meantime it appears strange that such a large force of isolation police should be sent out to assist in barricading the municipality when they were totally unarmed either with the material or legal requirements of offence or defence.

A company of volunteers with loaded rifles are worth ten times their number of special policemen. The average French rough knows from previous experience that it is his special privilege to shower stones, bottles and other description of brickbat upon the policeman's defenceless head, and he is aware, too, that he is pretty sure to escape the punishment that ought to follow such cowardly conduct. If the better portion of this island were not specially interested in rooting out variola from St. Cunegonde the inhabitants of that favored section might have the disease to their heart's content, but, unfortunately, the "sheep" mingle with the "goats," and unwilling victims are the result. In the city proper there is now very little small-pox; it has burned itself and has been vaccinated out of existence.

Apropos of this, an "Anti-Vaccination League" has been started in this city for the purpose of enlightening the public on the dangers of that serious and startling operation. Doubtless if a "Pro-Small-pox Society" were begun it also would receive a certain amount of support. In connection therewith a paper advocating the value of small-pox, and called, "The Weekly Variola," might find favor among the members. Evidence might be found to show that small-pox "clears the blood" of various "humors," and is not that odious affection which some persons imagine it to be. Statistics could be brought forward to show that the healthiest countries are those in which small-pox has raged; the names of eminent scientific and literary men and

women who were fortunate enough to get the beneficent malady might be published in large type, pointing out at the same time what increased vigor each exhibited after recovery; certificates testifying to the better health enjoyed by patients after a couple of months' quiet in St. Camille or St. Saviour's would be forthcoming—in fact, about as many special pleas on the side of universal variolation as are usually adduced to bolster up the worn-out creed of the Anti-vaccinationist. Increased facilities might also be arranged for the successful propogation of this desirable blessing among the rank and file of the Society.

When the supply of pure "picotte" runs low here, resort might be had to inoculation, or a few variolous patients might be "imported" from St. Cunegonde for the exclusive use of those members who were not fortunate enough to have previously contracted the disease. The "League" has been started rather late in the day, for anti-vaccination is fast getting to be a dead issue here, but the "Pro-Smallpox" might still have months of usefulness before it, as there is still a fair percentage of the community who have not yet indulged in the delights of the disease. I am, of course, aware that certain anti-vaccination "martyrs" have been threatened with the law, but if they will only use their influence to have the "League" converted into a "Society" of the kind described above, and will carry out its provisions in detail, although the membership of the Society may in time diminish, from natural causes, yet the *raison d'être* of the League will have departed and legal proceedings may be dispensed with!

To speak seriously for a moment, because the subject is a very serious one, it passes my understanding, first, how men of good judgment in *other* affairs (and the leaders of this movement are, to my knowledge, men of that stamp) can so contemptuously reject evidence of a kind which has so successfully appealed to minds of all kinds and conditions; and in the second place how, having decided to oppose vaccination, they should attack it at that point where its greatest strength lies, viz., its efficacy and freedom from danger. Something may be said against the expediency of *compulsory* vaccination, but the merest tyro, the most superficial observer of the epidemic just leaving us, must acknowledge the protective value and trifling character of the procedure called vaccination.

Somebody should protest against the Pasteur hydrophobia rage—against the unwise publication of sensational newspaper reports, and against the absurd conclusions arrived at from the inoculations already made by him. Pasteur may be depended upon to tell his own story correctly, but the value of rabious inoculation can only be properly placed when we know (1) how many of Pasteur's patients were bitten by animals suffering from *genuine* rabies. (2) Whether the percentage of recoveries is greater in these instances than in cases where other treatment has been exhibited.

I am inclined to believe that only a very small proportion of patients who take the pilgrimage to Paris for treatment are in any real danger from hydrophobia, and that this sensation, like many another that has in the past agitated the human mind, will in time give way to something newer or more attractive. In the interim everyone will wish that the noble French scientist will be able to add from the rewards of medicine to the lustre which surrounds his successful efforts in other departments of science.

Dr. Chadwick of Boston has given us his experience of "ten cases of pregnancy complicated with fibroids, with remarks." The results are as follows:

Miscarriage	1 case
Recovery of mother	7 cases
Death of mother	2 cases
Living child	7 cases
Stillborn child	2 cases

He says that intra-uterine disinfectant douches should be begun long before secondary symptoms set in.

P. A. LAVER, M.D.

MONTREAL, Dec. 28, 1885.

REVIEWS.

Lindsay & Blakiston Visiting List for 1886.

This list, published by P. Blakiston, Son & Co., of Philadelphia, is advertised in our pages. Reference thereto will show the price at which it can be obtained. We still use it and have done so for twenty years, and believe it, take it all in all, to be the best Visiting List issued. If this should be read by any medical man who has not yet adopted the plan of using a Visiting List, we advise him not to delay longer. Its use will save its value ten times over every week of the year.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, JANUARY, 1886. No. 4.

BOSTON MED. LIBRARY ASSN. MAY 6 1886

CONTENTS.

ORIGINAL COMMUNICATION.

Clinical Lecture at the Pennsylvania Hospital, Philadelphia..... 361

PROGRESS OF SCIENCE.

On the Treatment of Acute Rheumatism. 363
On Anesthetics..... 364
The Curability of Consumption..... 367
Therapeutics of Cholera Infantum..... 369
Notes of Four Cases of Varicose Veins Treated with Hamamelis..... 370
A case of Obstinate Hiccough relieved by Nitro-Glycerin..... 371
Fothergill on Hepatic Disorders..... 372
On the Therapeutic Value of the Chloride of Calcium..... 372
Iodised Phenol in the Treatment of Whooping-Cough..... 373
The Treatment of Acute Laryngitis..... 373
Brief Notes on the Treatment of Acute Coryza..... 374
The Elements of Prognosis in Bright's Disease..... 375
Treatment of Abortion at the Fourth or Fifth Month, with retained Placenta.. 376
On Some New Medicaments..... 377
How to Treat Wounds of the Fingers.... 377
Cancer of the Uterus..... 378
Case of Cæsarean Section after Death of Mother—Living Child Removed..... 379
A New Method of Reducing Dislocations of the Hip..... 379
The Treatment of Asthma..... 380
Jaundice and Pain in Billiary Colic..... 380
Leucorrheal Discharge from Roller-Skating..... 380
Santonine in Amenorrhœa and Dysmenorrhœa..... 381
Belladonna and Iodide of Potassium..... 381
Vinegar in Puerperal Hemorrhage..... 381
Soothing Application in Neuralgia..... 381
Transmission of Phthisis between Man and Wife..... 381
Delacour's Lip Salve..... 381
Hæmorrhoids..... 381
A Mixture for Whooping-cough..... 382
Vomiting of Pregnancy..... 382

EDITORIAL.

The Origin of the Epidemic..... 382
Bovine-Vaccine Points..... 383
Lactopeptine..... 383
Personal..... 384
Reviews..... 384

Original Communications.

CLINICAL LECTURE, AT THE PENNSYLVANIA HOSPITAL, PHILADELPHIA.

By THOMAS G. MORTON, M.D.

Reported for the *Canada Medical Record* by Dr. J. F. Edwards.

MUSCULAR ATROPHY FROM INFLAMMATION OF NERVES.

I have before spoken to the class about the changes that will take place in a part consequent upon inflammation and secondary changes in the nerves of such part. If a nerve be injured or from any cause inflamed, it will become sclerosed; even if the inflammation originate in a branch or a filament of the main nerve it will extend up to it, and the nerve, as I say, becoming sclerosed, the nutritive life of the part will be interfered with, and it will atrophy, so that after an injury to a nerve there will always ensue more or less atrophy. It is of practical importance for you to remember this, for it may help you out of a scrape. It will sometimes happen that, after you have operated upon a child for club-foot, this atrophy, the cause of which has been congenital, or at least has arisen from what I have already told you, will cause the parents to claim that you have cut or injured some nerve or some part that you ought not to have cut, and you may be bothered with a suit for malpractice. The small branches, as I have said, may influence the main nerve, and, though the synovitis (which may have been the original cause of the trouble) may be well, still the sclerosis will go on. We have such a case before us. This young man has had a synovitis, there can be no doubt of this, for you see the swelling and tumefaction about the knee, while there is luxation forwards of the femur or backwards of the tibia, whichever you may choose. As a result you see how this limb has atrophied. Some might claim that this atrophy was due to want of use, but such is not the case, a very slight amount of the atrophy might possibly be due to this cause, but the young man has been able to walk about all the time, so that his leg has been exercised and we must therefore look beyond disuse for the cause of the atrophy, and this atrophy, just as in the wasting of club-foot, will be permanent; the atrophied limb will never catch up to the other one, there will always be a marked difference. You will always find the limb, and the foot itself, from an inch and a-half to an inch and three-quarters shorter in the clubbed side than on the other. Some have claimed that congenital club-foot is due to intra-uterine pressure, but this is an error; it is caused, just as is the acquired disease, by the nervous changes already referred to. To return to the case before us, I introduce a probe into this fistula, and find dead bone at the bottom; now this fistula will never heal so long as the dead bone, or indeed any other foreign body, remains at the bottom of it; such fistulas will sometimes persist for forty or fifty years unless the cause be removed. In some cases the process of separation by nature is so slow that in order to aid her we would be compelled to make such a large wound that we are compelled, by prudence, to let it alone and wait for the slow process of nature. I will now apply the Esmarch bandage and see what it is best to do. I must be very cautious in this case, for the fistula is in the close vicinity of the femoral artery. The

finger is the best probe, and when I have insinuated my finger down to the bone, if I find the necrosis near the other side from that in which the fistula is, I will consider the advisability of removing the sequestrum from a counter-opening on the other side, which would insure better drainage. In such a case as this, if you could absolutely promise the patient that he would recover, it would be the better plan to amputate, because an artificial limb would be much more useful than this crippled member can ever be; but the risk would be great, and we would not be justified in taking it. When I try to introduce my finger, I find considerable difficulty for, as is often the case, the tissues about a fistula have become very dense. Now I find a large piece of bone loose, and I can readily remove it without making any new incision. The operation, as you see, has been bloodless, but, now, when I remove the Esmarch, considerable hemorrhage occurs; the granulations covering the bone are very exuberant, and they bleed almost as would an artery. This is a good sign, for it shows that there is a good blood supply to the part, that will favor the reparative process; it is readily controlled by a bandage from below up the limb and elevation.

Gunshot Injury—Amputation.

Six weeks ago, this man, who is 30 years old, was loading a gun, when it discharged prematurely, driving a portion of the ram-rod into his hand. The presence of this foreign body was not suspected at the time, but two weeks later it was found and removed. Free drainge was procured, but the injury to the deeper structure had been very severe; the wrist joint was opened; the carpus destroyed, and even the ulnar was involved. Abscesses formed and the pus burrowed along the flexor-tendons, causing abscesses in the fingers and it also extended up the arm. There has been so much disorganization that we have decided to amputate, because we cannot hope to save the hand. When I merely shake the hand you can hear the carpus rattle. Necrosis of the bones of the wrist is very unsatisfactory to treat without operation; with the ankle it is different, because there are less bones, they are larger and there is more nutrition; while in the wrist, the bones are smaller and less abundantly nourished. Such a case, if it healed at all, would leave a stiff and useless hand, but it would be much more likely to destroy the patient by exhaustion from repeated suppuration. When to amputate is a question to decide. If it is performed within twenty-four hours after the injury it is a primary operation; at any subsequent time, it is secondary. After the receipt of the injury there is a condition of shock, when the thermometer will pursue a zig-zag course for some time, as one abscess after another forms and opens, the system being impressed by the pus formation, and relief produced by its evacuation. After three or four weeks the system becomes habituated to the discharge, the condition becomes chronic, the functions were in a fair condition, and it is now a favorable time to operate. If it be postponed, the patient is liable to become exhausted, colliquative diarrhœa may set in, and the result prove disastrous. When this man first came in his temperature was 104°. During the course of the abscesses it varied from 98 to 103°, and now, for a week, it has been nearly normal. This shows a good indication for the operation, and if we postpone it longer the pus may extend up the arm, form more abscesses, and necrosis of the radius may be added to that which we already have. Now, as to the site of operation. In this point we must be guided by the disease, and in this case I think the best point will be just below the middle of the fore-arm. Now we have a variety of methods of operation to select from: the circular; the oval; transfixion and Teale's. It will be best to make our flaps so that the scar will be on the under surface. We need not here fear retraction of the flaps, as in primary operations, because the exudation has so consolidated the parts that much of the elasticity has been lost. In this case I will not use the Esmarch, because such great pressure might crush the blood-vessels near the seat of the injury and interfere with the nutrition in the flaps; therefore I will preferably use a tourniquet. On the posterior surface of the arm I will make a long, rectangular Teale flap. Always try to have the larger vessels of the limb in the shorter flap. Now there is a triangular space on the under surface of the arm where there has been a loss of tissue, but, rather than disarticulate at the elbow, I will excise this denuded piece and stitch the edges together. You will always have more hemorrhage in secondary than in primary operations, because the small vessels which, ordinarily, are hardly perceptible, have, in the progress of the disease, become dilated, and they have also lost much of their contractility.

So that here you see we have considerable hemorrhage; that from the smaller vessels can be

readily controlled by towels soaked in very hot water—almost scalding hot. We used to use cold water for this purpose, but I derive quicker results from the use of very hot water.

Progress of Science.

ON THE TREATMENT OF ACUTE RHEUMATISM.

Dr. W. R. Thomas spoke thus before the British Medical Association :

"Our knowledge of the treatment of acute rheumatism is making rapid strides day by day; but still we frequently meet with cases which are most unsatisfactory to treat, because, I believe, our knowledge is in its infancy. In medicine, we are all apt naturally to follow fashion. Certain remedies are recommended highly, and we are inclined to take it that all cases of rheumatism can be cured by the same remedy. Given a case of acute rheumatism, all we have to do is to give salicylic acid, or bicarbonate of potash, or nitrate of potash, or a certain other remedy at the time recommended, and attend to the ordinary directions given as to diet and hygiene, and the patient gradually, or often rapidly, is sure to improve. That is what we expect. Now I have tried each of the remedies recommended on a large scale in both hospital and in private practice, and have come to the conclusion, after noticing carefully, and I think without prejudice, the effect of each one, that there is no one grand remedy for the disease we call acute rheumatism. The bicarbonate of potash, which has always been a favorite remedy of mine, I have seen act like a charm; so also have I the nitrate of potash; and then again, other cases I have met with where the remedy has entirely failed to have any effect whatever upon the disease. During recent years I have given, time after time, salicylic acid in large and in small doses, and have been delighted at the immediate good effect, thinking that, at last, we had met with a certain remedy; then again, other cases have occurred where the salicylate of soda has had no appreciable good effect whatever, even when given in large doses, until certain symptoms were produced by the medicine.

"I do not think the remedies in these cases are at all at fault. When we prescribe a certain medicine in a certain case, we find that the patient derives immediate and surprising benefit; and then we give the same remedy in another case, which to us appears to be similar, and are surprised at the patient not receiving any benefit whatever. Now, why should this occur? Simply, I believe, because we have separate and distinct varieties of rheumatism, each one of which requires a treatment of its own. In one case, the salicylate will act well; in another, it will not have any effect at all.

"In hospital practice, we naturally attribute all the improvement that take place after admission to the medicine which has been prescribed. A patient is admitted; his temperature may be very high, his pulse very frequent, and the joint-signs may be severe; in two days he is in a comparative state of comfort. In many of these cases, no doubt the removal of a patient from a miserable hovel in a back lane, where the surroundings are of the worst kind, to a comfortable bed in a well ventilated ward, where cleanliness is predomnant, where warmth, proper food, and constant nursing are supplied, may have much to do with the rapid improvement which has taken place; and I do not think that we are justified in attributing all the improvement which takes place—at all events, during the first few days—to the medicines prescribed.

"In practice I generally find that we have at least three distinet varieties of rheumatism :

"1. The sthenic.

"2. The asthenic.

"3. That variety caused and preceded by other diseases, as gonorrhœa, scarlet fever, etc.

"The first kind I have generally found among the well-to do classes; sometimes among the poorer. The patient, perhaps a commercial traveller or merchant, has always been exceedingly well, and until lately has enjoyed very good health. For some months he has suffered from dyspeptic and hepatic derangements; his urine has generally been very high colored, and a large amount of sediment has been noticed daily in it. He has complained of frequent headache, backache, and aching of limbs. He is florid, and probably very stout, and has found that he has not been able to go through the same amount of work as he formerly could. Evidently he has eaten and drunk more than his body has been able to use and burn up daily; and the several excreting organs, having had too much work thrown on them for a considerable time, are not now able to perform their functions properly.

"I shall not deal with the pathology of rheumatism at all; but in this patient there is a tendency to inflammation of certain tissues, and to the accompanying fever. He now sleeps in a damp bed, or catches cold in some way, and now comes on the attack. These are the cases where salicylic acid, salicylate of soda, and the bicarbonate of potash are beneficial. Of the two, I am inclined to think that I have seen more benefit derived from the salicylate than from the bicarbonate; but I frequently begin by giving the salicylates, and then go on with the potash. Attention to little details we all find in rheumatism, as in all other complaints, of great importance; for instance, covering the whole of the front of the chest with a layer of cotton wadding has often, I am sure, prevented an attack of pericarditis from coming on, and I found a night-shirt of very thin wool very useful, as these patients, perspiring much, are very apt to catch cold; in fact, I now recommend all

my rheumatic patients to wear it regularly, and many have been very thankful for the advice. With regard to the joints, I have found wrapping the affected bones in cotton-wool all that is, as a rule, necessary, but when pain has been very excruciating, hot fomentations, with solution of belladonna sprinkled on the flannel next to the skin, have given relief. For pericarditis, my patients have generally seemed to be relieved by turpentine-stupes, followed by linseed-poultices; but unless it seem to be severe, I think it is advisable not take away the cotton-wadding or to apply anything else, for I feel sure that the less these patients are exposed the better. If possible, I avoid giving anything to procure sleep, but, when obliged to do so, I find our old friend Dover's powder the best. These patients generally require something to act upon their chylopoietic viscera; and I must say that I find nothing equal to five grains of pilula hydrargyri, followed by haustus albus, which draught has often to be repeated. As to diet there is nothing better for them than milk; and when the fever begins to subside, we can afford to be more generous.

"The asthenic patient is thin, pale and weak to begin with, from some cause or other; perhaps an over-worked and over-anxious young man, who in his desire to get on in the world has always neglected himself, and has taken his meals (and of them but little) irregularly; or a young mother, with one or two children, living on little else than tea. These patients have the same local signs and the same fever as the other patient had; but although there is the same tendency to inflammation of certain tissues, and the same fever, the tendency has, I believe, been produced by different causes entirely; and to obviate this tendency, or to remove the cause, we must, I think, adopt a very different mode of general treatment from what we do in the other class. These patients require plenty of support from the beginning, and we cannot give anything better than milk to begin with. Soon this patient will require beef-tea and other foods. As an internal remedy, I think we have none to equal quinine, giving from the beginning. Occasionally we may have to give other remedies when called for, but quinine is the remedy upon which we have to depend; and later on, I invariably find that the addittion of iron to the mixture is beneficial. The same local treatment is required in these cases as in the other. As aperients, colocynth and aloes are preferable to the mercurial and haustus albus.

"My object in speaking to-day is to express my candid opinion that we should not treat all cases alike, but first of all should take in to consideration the class of the patient we have to treat, and then to decide what remedy or treatment to choose—In one case it may be potash or salicylate, in other quinine. Of course, the treatment of rheumatism following other diseases will be different, as such will have to be taken into consideration."

ON ANESTHETICS.

In a paper read at a meeting of the British Medical Association by John Chiene, Esq., Professor of Surgery in the University of Edinburgh, he says:

The present outcry against chloroform is the result of an imperfect understanding of its physiological action; the proper method of administration; the dangers which may accompany its use, and their treatment.

Proper method of administration. Simple means are the best. A towel or handkerchief is better than any apparatus. If any apparatus is used, then the administrator trusts to the apparatus; the only sure trust is knowledge of the action of the drug, its dangers and their treatment. It is a matter of no importance how much is poured on the towel, except as a matter of economy; what has to be carefully attended to is the effect of the drug upon the patient. The administrator has to give his entire attention to the effect of the drug; The administrator must have his catch-forceps attached to his coat, and have confidence in himself.

In hospital practice, for the last eighteen months I have used Allis's ether-inhaler. By it chloroform is saved, and it is a convenient method of administration. As a rule I think the patient drops more quickly under the influence of the drug.

The administrator must watch the breathing and the appearance of the patient. The sense of feeling with the hand between the towel and the mouth is the best guide to the breathing. The heaving of the chest is also to be watched. The heaving of the abdominal walls is deceptive, as this may be due to contractions of the diaphragm, which may continue for some time without any air entering and being expelled from the chest. Voluntary stoppage of the breathing frequently occurs early in the administration. Experience will soon enable the administrator to understand this, and to distinguish it from stoppage of respiration due to the action of the drug on the nervous centers which govern the muscles of respiration. The sense of hearing may also assist in enabling the administrator to judge of the breathing. In antiseptic surgery the use of the steam-spray, accompanied by a hissing noise interferes with the sense of hearing; in such cases the surgeon must trust to the senses of touch and sight. If the breathing becomes shallow or irregular, accompanied by gasping or sighing, then the towel must be at once removed from the patient's face. When the breathing becomes deeply stertorous, then the patient has, as a rule, had sufficient; the towel must be at once removed. Stertorous breathing is not in itself an evidence of danger.

The appearance of the patient's face is also to watched. As long as the lips are red, the blood is being properly aerated, the circulation and the heart's action are unaffected. If the patient become livid or unnaturally pallid then there is danger.

Tell the patient that he is to take long breaths. Give the drug slowly at first, in order to prevent a choking sensation. Do not let the towel rest on the face, because it is apt to cause blistering. After a time the patient struggles involuntarily. Do not fight with him ; guide his movements ; and as the drug takes effect, they will soon subside.

How are you to know when the patient has had enough? There are three signs, all of which should be made use of.

1. By touching the conjunctiva. If the patient do not contract his orbicularis palpebrarum, then he is generally sufficiently under the influence. Sometimes, however, this is not a certain sign. The action on the nervous centers is progressive ; although sufficient for an operation in the region of the eye, the drug may not yet have affected the whole of the spinal cord and reflex action in the limbs may not be abolished.

2. Muscular relaxation, judged of by raising the arm and seeing if it fall heavily by the side.

3. Local sensibility at the seat of the operation. This is to be estimated by the surgeon pinching the part to be operated on with a pair of artery-forceps.

These three signs are all useful, and experience will enable the administrator to estimate their proper value in each case. Take away the towel the moment the patient is under the influence. A very common mistake is to suppose that, if the patient be breathing, then all is right. When the breathing stops then the patient is on the point of death.

No attention is to be paid to the pulse ; it is the last thing that stops. When the stoppage of the heart's action is due to the drug, then the patient is dead. Fortunately, the poison is a volatile one ; and if, from ignorance, too much has been given, interfering with the action of the heart, either directly by acting on the nervous centers which govern the heart's action, or indirectly by stoppage of the circulation, the heart may recover itself if the patient be kept alive by artificial respiration until the poison, in consequence of its volatility, is dissipated.

The administrator has to devote his attention to other things ; and, if he attend to the pulse, he can not pay sufficient attention to the more important signs—important because they occur earlier in the administration. Attention to the pulse by a second person is not necessary, because the signs which I have already given will be quite sufficient to prevent danger. There is a division of responsibility. Assistance is apt to make the administrator trust to his assistant, and not to be sufficiently watchful himself of the other signs which guide him in the administration. It is not necessary to use the stethoscope in order to test the propriety of giving chloroform. If there be heart disease, or weak action of the organ, then these are the very cases in which chloroform is most useful, because they are most liable to the occurrence of shock, which the drug prevents by abrogating sensibility.

The dangers which may accompany its use and their treatment. We must always be prepared for these. They may occur in any case, because the drug acts with much greater rapidity in some cases than in others, and we can never in any case foretell how rapidly the drug may act. The frontier-line between the abolition of sensation, voluntary motion, and reflex action, and stoppage of the circulation and heart's action, is often very indistinctly marked. In old people this is the case ; to them, the drug must be administered with the greatest caution.

[I have occasionally seen troublesome symptoms in young children ; and, while I say that in old people the drug must be given with the greatest caution, I do not wish it to be understood that children can take it without risk.]

We may reach the dangerous effects earlier in some than in others ; hence the great care necessary in every case. The order in which the effects take place is the same in all. This must be distinctly understood.

These dangers may be classed under four heads :

1. *The tongue falling back* and closing the glottis, in consequence of paralysis of the muscles which hold the tongue forward. The signs of this are lividity of the face and shallow breathing, as the air does not enter and leave the chest in sufficient quantity. The patient is in the same state as if a piece of meat had stuck in his pharynx, closing his glottis. The piece of meat is his tongue.

2. *The glottis closing*, due to paralysis of the intrinsic muscles of the larynx. The signs of this are lividity and a crowing sound, as heard in a case of croup, acute laryngitis, or laryngismus stridulus.

3. *Fainting.* This is due to an imperfect supply of blood to the brain, the result of either the sitting posture during administration, as the dentist's chair, or to a naturally weak heart in the aged or prematurely aged person. The sign of this is unnatural pallor of the face, judged of more especially by the paleness of the lips. The faintness may be due also (at the commencement of the administration) to fear on the part of the patient. It may also be due to any cause which may give rise to faintness in general. In this case, the chloroform has nothing whatever to do with the faintness ; it may be associated with, but in no way due to, the chloroform. The faintness may also be due to want of confidence on the part of the administrator. He fears the drug, from ignorance of its physiological action. He commences the operation before the patient is sufficiently under the influence. The patient is then in a condition which renders him most liable to shock. He is unable to brace himself up to bear the pain ; his nervous centers are in a semi-paralyzed condition. The unfortunate result may follow, namely, imperfection or stoppage of the heart's action, followed by syncope.

4. *Vomiting.* This is only dangerous if there be food on the stomach. The food passes into the pharynx, and may pass through the semi-paralyzed larynx, and cause suffocation by passing into the bronchi. If the stomach be empty, this danger can not occur.

The treatment of these dangers is as follows:

1. *The tongue falling back.* The head is to be turned on one side, in order that, by its weight, the tongue may pass to one side, and the opening of the glottis may be free for the entrance and exit of air. If this do not at once effect the object, then the tongue must be removed from its dangerous position, and for the same reason that, if a person be choking from a piece of meat lying on his glottis, the proper treatment is to remove the obstruction. The best way to do this is to seize the tongue with the catch-forceps and pull it forward so that the tip of the tongue appears between the teeth.

2. *The closure of the glottis,* due to paralysis of the intrinsic muscles of the pharynx. To remedy this danger the tongue must be pulled forcibly out of the mouth. By so doing, the epiglottis is pulled forward by stretching the ligaments which unite it to the tongue; the epiglottis, passing forward, stretches the aryteno-epiglottidean ligament, and separation of the vocal cords follows. The action here is purely mechanical, and was first explained to me by Dr. John Wyllie, who first described this effect of forcible traction on the tongue. This can be verified on the dead subject.

[From further experience, I am inclined to lay greater stress now than I did in 1876 on the view of Lister, published in Holmes's System of Surgery; namely, that the forcibly pulling forward of the tongue acts reflexly, stimulating the respiratory centers. I can not, however, lay altogether aside the mechanical theory described in the text. Lister's theory has strong corroboration in what I have seen of Mr. Joseph Bell's practice in the Royal Infirmary here. In case of shallow respiration with or without lividity, in which the forcible pulling forward of the tongue has no immediate effect, he at once pushes his finger into the glottis; here the action, undoubtedly most beneficial, is two-fold, mechanical in opening the glottis, but mainly, as Mr. Bell holds, and I think truly, by irritating an excessively sensitive surface, and in this way reflexly stimulating the respiratory and cardiac centers.]

If these two dangers, the tongue falling back and closure of the glottis, be not treated at once, the result is that respiration does not proceed, the blood is improperly aerated, the lungs become gorged, the heart becomes gorged, and the result is, stoppage of the heart's action. If a rabbit be killed with chloroform and the chest opened, the heart will be found to be gorged with blood, and the contractions of the heart will be in abeyance; prick the heart with a needle, allow some blood to escape, and the contractions of the heart are re-established. This experiment seems to show that if, by striking the chest and by artificial respiration the action of the heart be not quickly re-established then bleeding from the external jugular vein should at once be resorted to. I have never yet required to have recourse to this remedy, artificial respiration having been sufficient. It must be remembered that it should never occur unless by a fault on the part of the administrator in not using at once the proper remedies—either removal of the tongue, if it be acting as a mechanical obstacle to the admission of air, or forcible traction of the organ if the obstruction be in the larynx itself in consequence of paralysis of the intrinsic muscles of the organ.

3. *Fainting.* The treatment is preventive and curative.

a. Preventive. Never give chloroform in the sitting posture. Never commence any operation, however trivial, until the patient is fully under the influence of the drug; it is far better not to give chloroform at all than to use it imperfectly.

b. Curative. If it occur as a result of a weak heart, or in consequence of an excessive loss of blood during the operation, or as a coincidence during the administration of the drug, then the head must be at once placed at a lower level than the body, the arms and legs must be raised to the vertical, or the patient may be held up by the heels, as recommended by M. Nélaton. The effect in all these ways is attained of restoring a sufficient supply of blood to the brain.

The good effects of Nélaton's practice are, in my opinion, of a twofold nature; first, by restoring the proper supply of blood to the brain in the most efficient and quickest manner; second, in many of the cases the danger may have been at the opening of the glottis, due to obstruction by the tongue; inverting the patient will at once remedy this by causing the tongue to fall forward. It will also be useful in cases in which blood, in operations about the mouth and nasal cavities, has passed into the bronchi, or in cases in which vomited matter has passed into the larynx, the foreign body being removed by inversion, as Brunel removed the half-sovereign from his bronchial tubes. The frequency with which Nélaton's practice has been attended by good results in cases of apparent death from chloroform, seems to show that inversion may act in this twofold manner, because obstruction of the glottis is a much more frequent danger in the administration of chloroform than faintness, which, as far as my experience shows, is comparativly rare.

4 *Vomiting.* Do not give any solid food for four hours before the operation. In railway accidents and other sudden injuries in which it is necessary to give chloroform, the greatest care must be taken; if vomiting occur during the administration, turn the patient on his side, in order to allow the vomited matter to escape from the mouth, and prevent any regurgitation into the bronchial tubes. In such cases, the administration of chloroform should be abstained from until the stomach is empty.

When the act of vomiting takes place, the stomach being empty, then the administration of more chloroform is required in order to stop the abnormal contractions of the muscular walls of the stomach. There is in such a case no danger from vomited matter passing into the larynx.

The dangers which accompany its abuse and their treatment. If an overdose of chloroform be administered—and it must be remembered that some patients are very susceptible to the action of the drug— the nervous centers which rule the muscles of respiration are poisoned; then the treatment required is to pull the tongue forward, in order to allow air to enter or leave the chest by artificial respiration. It is a volatile poison, and perseverance in artificial respiration must be continued until the volatile poison passes away. A case recorded by Dr. J. J. Brown, in the Edinburgh *Medical Journal* (Nov., 1874) well illustrates this important fact. By artificial respiration, kept up continuously for two hours and three quarters, he saved a patient in whom complete paralysis of the respiratory ganglia had occurred, but the cardiac ganglia were unaffected. The case also shows that the respiratory ganglia are poisoned before the cardiac ganglia. When the overdose is excessive, then the heart's action is interfered with; by artificial respiration, striking the chest-wall with a wet towel, and the use of the galvanic battery, it must, if possible, be restored.

THE CURABILITY OF CONSUMPTION.

In an article on pulmonary phthisis in the *Medical Record*, of the 21st ult., Dr. J. Milner Fothergill, of London, makes the somewhat startling assertion, based on an experience of ten years in a chest-hospital, that the disease is far from being necessarily fatal. Under fairly favorable circumstances, he holds, a rally may be made in the large bulk of cases, which may lead to recovery. This is glad tidings, and a detail of the means through which this consummation may be reached will be eagerly read. It is customary in acquainting the patient of the fact that he has consumption to do so in a tone and manner calculated to shut out from him the faintest ray of hope. Treatment, moreover, is usually undertaken with a view to euthanasia, rather than with a hope to snatch the brand from the burning. If, therefore, Dr. Fothergill has put in our power to tell the consumptive that the odds are in favor of his outliving his disease he will prove to have been one of the greatest of the benefactors of this and succeeding ages. He does not propose anything particularly new in the way of treatment, nor does he vaunt any specific. His common-sense application of means already familiar will, however, commend themselves to the attention of the profession.

The line of attack advised in incipient cases is to improve the general condition, in which improvement the new growth have its share. To check the body expenditure and to increase the body income are our aims. All out-goings must be stopped. This is the first step. If a woman, attend to any leucorrhœa at once. Many a good line of attack has failed, many a woman sunk into her grave who might have been rescued, if only that out-going had been attended to. If the catamenial loss be heavy, put an arresting finger upon it by some ergot, sulphuric acid, and sulphate of magnesia, commencing with this two days before the appearance of the flux, and continuing it during the flow, reverting to the usual treatment on its completion. Then, is there diarrhœa? If so, attend to it. Milk and farinaceous matters are indicated (no meat-broths, no beef-tea—"giving the patient a stone when he asks for bread"—unless some farina be added). Then for medicine some astringent preparation of iron may be given in the day, and a pill of sulphate of copper (gr. ¼ –½) with opium (gr. 1–1½) at bed-time. If there be both diarrhœa and night-sweats this pill will often "kill two birds with one stone."

If there be night-sweats, arrest them at once, or as soon as may be. Sweat is an excretion, and is highly charged with blood-salts. Consequently, profuse sweats are most exhausting. Check them, and the appetite returns, and between the two the patient does well. Prof. Sidney Ringer, F.R.S., has laid the phthisical world under a deep debt of gratitude by pointing out the potency of belladonna in the matter of hydrosis. The best preparation is atropine, not only because it is tasteless, but because we know exactly what we are doing when using it. But to secure its good effects it must be pushed. Its effects upon the pupil is nothing. Indeed, in a very extensive use of belladonna the pupil has rarely been affected. (The effect upon the pupil is a bug-bear which ought to be buried). Dry throat and dim eyesight are discomforts, but unless severe they need not disturb the treatment. There is a wide gulf between these and any real danger. The very lowest dose is $\frac{1}{75}$ of a grain. If this does not achieve the desired end, then $\frac{1}{50}$. If that is insufficient, then $\frac{1}{25}$. If that fails—which it rarely does—one must begin to look seriously at the case. When this dose is reached, and yet the sweats continue, Dr. F. adopts the plan of an Old New York quack, of which Lewis Sayre told him, viz., to sponge the paper over with hot vinegar (½ pint) with a teaspoonful of cayenne in it. This is not at all disagreeable, and is effective. If the combined measures fail, the patient's case is hopeless, but his physician's conscience is clear.

Perhaps the patient's rest is broken by cough. Dr. F. recommends the following combination in such cases: Morphine, (gr. ⅓), atropine (gr. $\frac{1}{25}$,) with pil. galban co. or "pil. al. et myrrh.," as the case may require. This is a pill which has done him yeoman service in his warfare with phthisis. It has found its way into the Brompton Hospital, and more recently into Squire's *Companion to the Pharmacopœia*." It will, he thinks, find its way

before long into every consumption hospital in the world. This action of carbonic acid upon the sweat-glands has led Dr. Lauder Brunton to advocate strychnine (a potent stimulant to the respiratory centre) in the night-sweats of phthisis. No doubt it is useful. Dr. F.'s practice is to give it in the day-medicine. His favorite mixture at the hospital consists of liquor strychnine (4 minims), acid. phosph. dil. (15 minims), tincture capsici (4 minims), in infus gent. (3 dr.), *ter in die.* This forms a capital tonic. Some quinine or sulphate of magnesia (or soda) may be added as required.

One of the rules which have formed themselves in his mind is to give acids when the tongue is clean or coated. When the tongue is bare, raw, or irritable, then alkalines are indicated as am. carb. (g. 2 to 5), tinct. nuc. vom. (10 minims)inf. gent. (1 ounce), *ter in die.*

On such a line of treatment the patient usually improves. The night-sweats cease, the appetite returns, the cachectic look departs, and the patient feels much better. The improvement is maintained, and soon iron and arsenic can be added to the strychnine, and cod-liver oil to the dietary (but cod-liver oil is not the best form of fat, nor yet the most palatable, though it is the most digestible. Some forms of fat in an emulsionized state are now on the market which possess many advantages over cod-liver oil). Iron is a good hæmemic.

Arsenic is an alterative and a tonic greatly believed in by many good observers in lung-consolidation. If the patient can be induced to take fat in any form the healthy tissues can be built up. Very commonly the affected area is found to shrink, and air to pass into it. In a few months, in many cases, it is scarcely possible to detect any change in the lung. The threatened danger has passed away!

All along in the treatment advocated the matter of improving the condition has never been lost sight of for a moment. If the patient can get away to a dry soil and a bracing locality, all the better for him or her.

Another common patient is the person who has chronic phthisis with cavities. Such patient is always spare and badly nourished at the best; and when any intercurrent ailment still further lowers the general condition the lung trouble is aggravated. (And one matter has forced itself upon his attention, viz., that wherever there is old lung-consolidation any disturbance in the liver sets up irritation in this consolidated patch with resultant cough. And this cough, which is intractable to ordinary cough-medicines, is relieved by acting upon the liver.) The appetite has fallen off and the nutrition is impaired; and then the special danger in phthisis is set up. Very often the tongue is raw, or beef-steaky, or patchy. Here attention to the *primæ viæ* (as our grandfathers phrased it) is imperative. The patient must be sent to bed, to reduce the body expenditure to the minimum. The medicine must be bismuth, with alkalies; and the food, milk with malt extract, or a malt preparation with Mellin's food, in small quantities at a time, oft-repeated. No solid particle in the stomach to vex and irritate the sensitive (because ill-fed) mucous membrane. Even an alkali—like carbonate of magnesia—may be required to neutralize acidity and prevent too firm curdling of the milk: as much as will lay on a sixpence to half pint of milk is usually sufficient. Having got the assimilating processes into good working order, the tonic may be given. "The more haste the less speed" is especially true of the treatment of phthisis; and the desire to push on with tonics and good food sadly too often defeats its own end. Sometimes a masterly inactivity is the wisest practice A clear head and a firm will are often required to curb the desire of the patient (and still more the patient's friends) to be getting on. Back-cast after back-cast teach a painful lesson to the medical man, and involve the patient in acute danger. If the pressure put on a young medical attendant is becoming more than he can bear, let him call in an older head to help.

The chief thing to avoid is morphia tinctures for the cough. An opiate to procure sleep may be essential and unavoidable; but sedatives in the day are dangerous. They give relief from the cough but too commonly they give permanent relief by death. Opium lays its palsying hand upon the assimilative organs, and destroys the appetite. Its evil effects seem most distinctly felt by the liver. When an opiate is indicated at night it should be combined with ipecac to antagonize its effect upon the liver, and with aloes and myrrh pill to correct its actions upon the bowels. Opium strikes directly at the assimilation which is the cardinal matter in the treatment of phthisis. The patient most certain to die, the case least amenable to any treatment, is that one whose wasting progresses steadily, and where the lungs are only affected quite late on—indeed, a brief while before the final change sets in.

As to other means of allaying the cough than opiates, inhalations of steam are often serviceable. Friar's balsam, iodine, carbolic acid, terepene, eucalyptus, all are good as additions to steam. Where there is a cavity with ragged walls smelling offensively, a respirator with cotton wool charged with carbolic acid is indicated.

Then, as to the other means of feeding the patient, there are inunctions of oil, often of service, especially with young subjects. Nutritious enemata have only lately suggested themselves: but in one case of a medical man steadily wasting an enema of cod-liver oil (emulsionized by a drop of bile) and milk in equal quantities is being tried. Such enema night and morning, while in the recumbent posture, would be readily retained. When the temperature mounts up, and especially when the skin is also moist (the usual state in hectic fever connected with phthisis), Dr. F.'s plan is to give quinine (gr. 2 to 5) with tincture of digitalis (10 to 15 minims) and dilute phosphoric acid (15 minims,) thrice daily. The effect is very satisfac-

tory usually. Where a severe racking cough is present, shaking the poor sufferer terribly, it may be necessary to give opiates; but, in the author's experience, such cough is very rarely found with pulmonary phthisis.

The treatment of hæmoptysis is quiet; no movement, no talking. When it arises from the bursting of an aneurismal sac in a cavity, or from an ulcerating process eating into a blood-vessel and opening a communication between the vessel and an open air-tube, syncope alone is likely to arrest it. In congestion of the lung it is often an excellent form of local bleeding. Men of old bled for its relief; now free purgation with mineral salts is in vogue. For small recurrent hœmoptyses the best treatment is to keep the bowels open. Ice, ergot, and dilute sulphuric acid may also be tried; probably they will do no harm. It is a bad plan to feed up a case of recurrent hemorrhage; it only fills the vessels rapidly, to end in more bleeding.

Finally, the management of phthisis pulmonalis, whether the less grave or the more serious conditions, is a good test of the knowledge, skill and tact of the practitioner, who must, like a competent soldier, be able alike to plan a campaign or execute a sudden change of front in an emergency. That is, he must be able to lay down a persisting plan of treatment, and promptly change his plan to meet some intercurrent conditions, as hæmoptysis or acute gastric disturbance.—*Med. Age.*

THERAPEUTICS OF CHOLERA INFANTUM.

Looking over the mortality-records of children, especially in the larger cities of the moderate and warm zones, with the view of ascertainingt he principal etiological factors, the frightful ravages of cholera infantum seem inexplicable in view of its generally acknowledged causative factors. It is apparently in vain that the light of hygienic and sanitary knowledge is persistently, with word and letter, thrown into the dwellings of the poor, the gospel of fresh air and pure water will apparently never enter the crowded tenement-houses, and the high mortality-rate of children during the summer months remains stationary. It is unfair to blame the medical guardians of the community for the meagre results of their curative efforts, as long as even the most ordinary prophylactic measures are systematically ignored, if not ridiculed, by the ignorant portion of the poor public.

We present to our readers in the following a full abstract of a classical essay by Dr. Baginsky, of Berlin, treating of the prophylaxis and therapeutics of cholera infantum.*

The prophylaxis is to begin with the most careful notation of every dyspeptic disturbance during the summer, especially in such children which probably some weeks previously suffered from a dyspeptic catarrh or have just been weaned. The dyspeptic catarrh may or may not be dependent upon dentition, at any rate, it is to be regarded as a serious morbid condition. The foolish view of many mothers, and—it is to be regretted—also of physicians, that diarrhœa in children comes from the teeth, and consequently requires no astringnent or any other treatment, slays annually thousands of young children.

If the catarrh, in spite of strict diet and appropriate remedies, cannot be mastered even after a complete change of nutrition, the child is to be sent to the country under careful medical attendance.

The therapeutics of the affection will vary according to the stage of the latter in which the treatment is begun, and may either be the attack itself or the so-called period of reaction.

The treatment of the choleraic paroxysm is intended (*a*) to check the hyper-excretion, (*b*) to revive the cardiac power, and thus protect the system against the danger of collapse. To satisfy both indications is only possible in the beginning; later, during the stage of existing weakness, the second object engages exclusively the medical attendant. The question whether medicines, which, like opium, subdue the violent intestinal peristalsis, are proper, is to be answered in the affirmative, but only conditionally. Opium is for children of a very tender age a highly dangerous drug; its action is often unquestionably favorable, but is surely harmful where it does no good. Its applicability, then, must be determined by the peculiarities of each single case. If the child is very restless, or if constant whining, violent movements, and expressions of pain when the abdomen is touched, point to abdominal colic, opium has to be resorted to, and is best given in combination with an antiferment, such as calomel, iodoform, resorcine, or bismuth. The tincture of opium is to be given in doses of 2 to 3 drops, the extract in correspondingly smaller doses; Dover's powder and hydropathic applications usually act very well. The more quiet and apathic a child is from the beginning, the softer and flabbier the abdomen, the more the diarrhœa, as it were, passes off insensibly, the less appropriate is opium, the greater the danger to hasten the lethal exit through sopor and somnolence.

The antiferments assist likewise the stoppage of the diarrhœa by eliminating the fermentation of the ingested matters which produced the heightened peristalsis. These remedies may also be employed alone without opium; our expectations though, in this case, must be moderate. Astringents, both the metallic and vegetable ones, are decidedly contraindicated during the choleraic attack, though they are very valuable in the secondary catarrhs.

Rectal washes, consisting of large quantities of lukewarm water, are more effective than generally

* This essay forms the third series of Baginsky's work, entitled "Practical Contributions to the Therapeutics of Diseases of Children." The first series treats of pneumonia and pleurisy, the second of rachitis.

understood. If, in spite of all instituted measures of relief, the collapse progresses, the extremities grow cold and the skin pale, the fontanelles recede and the face assumes what is known as the hippocratic expression, medicines intended to stop the diarrhœa are no longer appropriate; true stimulants are then called for. The dietetic means, such as black, strong coffee and alcoholic stimulants (such as cognac, champagne, and genuine port wine), will also revive the flagging vitality. Small quantities are to be administered in short intervals, from a few drops to a teaspoonful, according to the age of the child. Wine is best given by itself, cognac with soda-water (cold), coffee best warm, and only if vomited, cold. Among all eligible medicines camphor, benzoic acid,, liquor ammonii anisati or liquor ammonii succinii deserve the preference. The following may be given every two hours in children of ½ to 2 years:

℞ Camphoræ tritæ,
Acidi benzoici, aa 0.03-0.05 grm. (½-¾ grain);
Sacchari lactis, 0.5. grm. (7½ grains).

Or the following:

℞ Liquor. ammonii succinii. 1-2 pts. per 100;
One teaspoonful every half-hour.

Unfortunately, all medicines are very liable to be vomited up in this, and, in fact, in all infantile affections; under these circumstances hypodermic medication should unhesitatingly be resorted to: acetic or sulphuric ether, in doses of 2 to 5 drops, or the tincture of musk recommending itself best. All are well borne, and act, often with surprising promptness, in raising the arterial wave and stimulating the great nervous centres.

During the height of the collapse, marked by diarrhœa and vomiting, food (including even the mother's breast) is of course wholly interdicted. To quench the great existing thirst. seltzer-water, with wine or cognac (cold) or coffee, is to be freely given. Warming bottles are to be placed to the feet and cold compresses every half-hour to the abdomen as long as any algidity is absent. Is it advisable to bathe children during the paroxysm? Some authors praise baths, both cold and warm, though the former are scarcely advisable. Warm baths, especially when combined with chloride of sodium or calamus, are said to be of advantage, though Baginsky has never obtained any palpable benefit from them. The same is true of mustard-poultices and mustard-baths, though both should be tried, as, besides being harmless, they may at least cause a momentary improvement of the child's condition.

The period of reaction requires a novel and equally careful attention to the patient. The condition known as hydrocephaloid is here well to be separated from the so-called typhoid state. Hydrocephaloid manifests itself as a uniformly advancing phase of constitutional failing, and calls for a protracted mildly stimulating treatment. This is best initiated with either the mother's milk or ice-cold cow's milk, or Biedert's food. The child is now to be kept warm by warm compresses to the abdomen and even to the head; internally (in addition to the above-stated excitants) wine or coffee are to be given. Complications, such as bronchial irritation, abscess, or albuminuria, of course require the ordinary special attention.

In the typhoid state of cholera infantum lukewarm baths or lukewarm applications to thorax and abdomen are especially indicated when the respiratory tract has been attacked. Senega and the liquor ammonii anisati will then act much better than ipecac, which is rather apt to heighten the already existing inclination to vomit.

The cornea and conjunctiva usually do not obtain the degree of attention to which these important structures are entitled. The eye is to be repeatedly moistened with lukewarm water or covered with a cloth saturated with greatly diluted chlorine-water.

NOTES OF FOUR CASES OF VARICOSE VEINS TREATED WITH HAMAMELIS.

BY B. F. NICHOLLS, M.D.

In April, 1883, I read in the *Philadelphia Medical Times*, No. 402, an article by Dr. J. H. Musser on "The Treatment of Varicose Veins with Hamamelis." A few days after I read this article, Mrs. W., a married woman, age 35, called at my office on account of swelling and varicose veins of the left leg. On examination, I found the left leg considerably swollen, with here and there large dark spots, which on pressure were quite soft and somewhat tender. These spots were as large as eggs, and situated on the inner aspect of the calf. The right leg was all right. Mrs. W. was three and a half months pregnant with her fourth child. She had always experienced trouble with the veins of her left leg while pregnant, beginning about the third month of pregnancy, and continuing till delivery. In her former pregnancies her leg had been treated by bandaging, which afforded some relief, but her distress was so great that at times she was compelled to seek relief by lying down. I concluded to try the hamamelis and ordered to take one teaspoonful ext. hamamelis four times a day in a wineglassful of water. She began to improve at once, and continued to take the drug till delivered. Her leg gave her no trouble, the swelling and varicose veins disappearing altogether. Mrs. W. is again pregnant, and the varicose veins appeared again at the usual time. She is now taking hamamelis with success.

The second case is a young colored man, age 30; has had varicose veins for two years. He got some relief from bandaging, but relief was only temporary. Last November he came to my office with a ruptured vein, considerable oozing of blood. Put on a compress and ordered hamamelis, teaspoonful every three hours. Saw him next day, took off compress, no bleeding. Con-

tinued hamamelis. Did not see him again for two months, when he reported at my office well. Have seen him several times since, and he has no return of his varicose veins.

The third case was a woman, age 50 years; was a washerwoman; had had varicose veins for a long time; did not remember when they first came; was treated by adhesive strips and bandage, but always returned after the bandages were left off for a short time. I gave her hamamelis, two teaspoonfuls three times a day in water. She got entirely well in two months, and has remained so ever since.

The fourth case, a woman, age 47 years, sent for me May 10, 1883. I found her sitting in a chair, bent forward till her face was between her knees, her hands clasped firmly together, her legs stuck out in front, covered with wet cloths. I do not think I ever saw in my life such a picture of utter hopelessness as this patient. When I approached her, she looked up, and in the most piteous voice exclaimed, "For God's sake, can you do anything for me?" On examining her legs, I found the cause of all her troubles: both legs were a mass of ulcers from the knees to the ankles. From ulcers was oozing a clear fluid, which soon turned the cloths black. Situated a little behind the knee were several bunches of varicose veins. I thought I had found the original trouble. On inquiry, she said at first, some five years ago, her leg was full of large veins and considerably swelled, and the ulcers came afterwards. I put her on extract of hamamelis, a teaspoonful every three hours, and told her to keep cloths wet with hamamelis applied to the leg. She recovered in two months and all she has left to remind her of her former trouble is considerable discoloration on the anterior aspect of her legs. She walks all about the city, experiencing no trouble whatever.

The extract of hamamelis used in all my cases was procured at Bullock & Crenshaw's.

In conclusion, I would say that I consider hamamelis almost a specific in varicose veins from almost any cause. I did not find it disagree in any way with my patients. It is not at all unpleasant to the taste.—*Philadelphia Medical Times.*

A CASE OF OBSTINATE HICCOUGH RELIEVED BY NITRO-GLYCERIN.

Dr. O. T. Schultz reports in the *American Practitioner* for September, 1885, a case of a miller, aged 58, affected with fibroid phthisis, in whom the severity of the cough had apparently brought on several very violent attacks of angina pectoris. The attacks had been rapidly relieved by morphine. During the excessive heat of the last weeks of July, hiccough set in, which continued with moderate severity for three days before Dr. Schultz was called in. Chloroform administered internally gave temporary relief but at the end of two days his seizures had increased in number and severity, and were attended by occasional attacks of dyspnœa. Morphine and atropine only produced relief when the narcotic action was at its height, while it gave rise to a condition resembling alcoholic intoxication, to sleeplessness, and to an increase of the chronic gastric catarrh which also complicated the case. On the sixth day strychnine was given, and the morphine limited to half a grain at bedtime. On the eighth day, there being no improvement, electricity was added. Galvanization of the phrenics and of the epigastric region gave no relief. A powerful induced current applied to the epigastrium and along the costal region of the diaphragm broke up the spasms after five minutes. There was complete absence of hiccough for half an hour after each sitting, the attacks being less violent and less long in the intervals between the *seances*. Improvement, however, did not last long. On the ninth day potassium bromid., gr. xxx, and strychnine, gr. 1-80, were given every third hour. Only very transient relief was afforded by this combination, the hiccough being not quite so severe for a short time after the prescription had been taken. The next night was almost one constant hiccough, and on the morning of the tenth day the induced current failed to interrupt the attacks.

The patient's condition now became very critical. There was only very rarely a cessation of the spasms, day and night. The appetite had improved since stopping the morphine, but the food taken was ejected as soon as it was swallowed. There was exquisite tenderness along the line of attachment of the diaphragm, and soreness and burning in the whole chest. When he coughed, long and distressing spasms of the thoracic respiratory muscles would set in. He was worn out, and entirely despondent. The temperature was normal and the pulse 100. The bowels were kept freely open with calomel, senna and salts.

Thinking that the causes which had given rise to the former attacks of angina pectoris might be identical with those which originated and kept up the present singultus, and knowing what an excellent remedy nitro-glycerin is for the former form of spasm, Dr. Schultz concluded to try this drug in the case. One drop of a one per cent. solution was given at 8 A.M. of the tenth day, and repeated at 9 A.M. A moderate degree of bursting headache set in immediately on swallowing the dose, the hiccough became easier and rarer, and by 9.30 o'clock had ceased entirely. The medicine was continued every two hours. At 2 P.M., after drinking a glass of iced milk, the spasms again appeared, but yielded quickly to a new dose. During the afternoon and the night there was only an occasional hiccough, but on the eleventh day a short attack appeared at 2 and 6 P.M. The medicine was steadily continued. The spasmodic movements now ceased entirely. On the twelfth day an occasional dose of the nitro glycerin was exhibited and a tonic of iron, muriatic acid, quinine, and nux vomica begun; on the next day the former was dropped entirely.

FOTHERGILL ON HEPATIC DISORDERS.

The functions of the liver and kidneys are closely linked together; and in those derangements where the urine has a thick sediment and the bowels are disordered, the old-fashioned doctor who shook his head and oracularly uttered, "Liver!" was not such a fool as it has recently been the rule to regard him. First cut down the amount of albuminoids eaten or drank, in order to reduce the demand upon the liver; then sweep away the waste from the blood by a pill at bedtime:

Pulv. pip. nig	grs. ij.
Pil. col. comp	grs.

and in the morning:

Sodæ pot. tart	ʒ j.
Sodæ sulphatis	℥ ss.
Tinct. zingiberis	ʒ ss.
Inf. gentian	℥ j.

with an equal quantity of boiling water, so as to make the draught as hot as can comfortably be borne. Let this be done twice or thrice a week, till the tongue is clean. When that is done, give the

Sodæ sulphat	ʒ j
Sod. et pot. tart	℥ ss.
Tinct. nuc. vom	gtt. vj.
Inf. cascarillæ	℥ j.

Ter in die before meals, and the pill twice a week.

If there be general asthenia, do not proceed to give iron until the tongue is thoroughly clean, the water clear, and the appetite good; and then commence with two or three drops of the dialyzed iron once a day, after food. In other cases, where there is only slight constipation, with deposits in the urine, especially after meals, give the old-fashioned dinner pill:

Pulv. ipecac	grs. j.
Pulv. capsici	grs. ss.
Ext. cinchonæ	grs. iij.
Pil. a. et myrrh	grs. j.

every day after dinner. It will be found very efficacious. If this dinner pill does not act sufficiently, give the morning laxative twice or thrice a week, so long as the bowels require it. Then as to the union of laxatives with tonics, it is well often to combine these two agents. In convalescence, tonics never act genially, if there be not at the same time time regular and sufficient action of the bowels; so, and sulphate of magnesia or sulphate of soda to the tonic.—

Mag. sulphate	grs. xx.
vel soda sulpha	ʒ j.
Quin. sulph	grs. j.
Ac. phosp., dil	m. xv.
Inf. gentian	℥ j.

Ter in die before meals, and ten minims of dialyzed iron after dinner, daily, will usually give good results; or,

Mag. sulphat	ʒ j.
Tinct. fer. mur	m. x.
Liq. strychnia	m. iv.
Inf. quass	℥ j.

Ter in die: forms a less expensive tonic, of much utility.

But in this use of laxatives, with occasional mercurials, avoid the pitfall of letting the patient eat with unlicensed abandon.

Now, in conclusion, let me tell the student to strive to see what are the indications for treatment what in this case, calls most imperiously for attention. He is taught too exclusively, at present, to look at disease from a deadhouse point of view. To make a diagnosis which would be corroborated in the deadhouse is the great matter! Yes, so it is at a medical school; but in practice for yourself, remember that a living, grateful patient, who has got well under your care, is worth far, far more to you than any amount of accurate diagnosis—which, so far as other persons and their opinions are concerned, is as voiceless to further your interests as the tombstones in the churchyard which mark your failures.—*Indian Med. Jour.*

ON THE THERAPEUTIC VALUE OF THE CHLORIDE OF CALCIUM.

Dr. R. W. Crighton, M. D., England, writes in *Practitioner*, concerning the chloride of calcium in the following positive terms:

In suitable cases I know of no other therapeutic agent that will produce the same good results. And, among these, first in glandular enlargements of the neck in children, where the glands seem massed together, and are almost of stony hardness, and in which both iodine and cod-liver oil have failed to reduce the bulk.

After some weeks' patient use of the chloride, with careful attention to diet and general hygiene, there seldom fail to be noticed a softening and separation of the individual glands, and generally, in a few months, such a reduction in size, or complete disappearance in milder cases, as to warrant the term *cure* being applied to the case. On the discontinuance of the remedy, however, an increase of size often takes place, necessitating its continuance at intervals for a year or more.

I have found the chloride of calcium equally efficacious in cases where suppuration had occurred—in fact, one of the earliest cases which I treated thus was that of a lady aged forty, who, from childhood, had scarcely ever been many months free from suppuration of some of the cervical glands. These had generally been incised, and cod-liver oil and the preparations of iodine almost constantly taken. She had been under my care for several years with this unsatisfactory result, when, in May, 1878, she was treated with doses of chloride of calcium thrice daily. In less than three months all suppuration had ceased, and the enlarged glands had become much reduced in size. I ordered her to continue the medicine at intervals; and, much to my delight, learned from her several years afterward, when attending her for some abdominal affection, that there had been

no suppuration in the interval, and that, on observing any increase in size of the neck, she invariably had recourse to it. In tabes mesenterica the good effects are striking and lasting, if the disease is not too far advanced.

In pulmonary phthisis I have not found the chloride so useful as I had been led to expect from the reports of Drs. Wood, Sanders, and others, and should recommend its employment in those cases only where there is evidence of the bronchial glands being decidedly enlarged.

In scrofulous caries I have witnessed quite as remarkable results from the prolonged use of the remedy as in scrofulous enlargements of cervical and other glands.

Valuable as iodine and cod-liver oil are in many cases of the large class of diseases comprehended in the term "scrofulous diathesis," I yet claim for the chloride of calcium, in certain instances, a special therapeutic power which neither of them possesses, and, in all cases of this diathesis, the merit of a valuable *alternative* remedy.

I prescribe the crystallized chloride of calcium, as the anhydrous salt forms a turbid solution and has an unpleasant taste. The recognized dose is from ten to twenty grains, or even more; but I have generally given a smaller one—one, two, or three grains for young children, and rarely over twelve or fifteen for adults. The formula is five ounces of the crystallized salt in fluid twelve ounces of syrup. The dose of this solution has varied from minims v to minims xl, according to age and other circumstances. I give it in milk after meals.

IODISED PHENOL IN THE TREATMENT OF WHOOPING-COUGH.

Rothe (*Memorabilieu*) announces his continued satisfaction with carbolic acid as a remedy for whooping-cough, after fifteen years' experience with it. The formula employed is as follows:

Carbolic acid, Alcohol,	each.....	7½ grains.
Tincture of iodine.....		5 drops.
Peppermint water.....		750 grains.
Tincture of belladonna		15 "
Syrup of diacodium.....		150 "

A teaspoonful is to be given every two hours, the administration being continued until the paroxysms entirely disappear.

ASTHMA.—

Tinct. lobellia.....	oz. j.
Ammon. iodidi.....	dr. ij.
Ammon. bromidi.....	dr. iij.
Syr. tolu	oz. iij.

M. Sig.—A teaspoonful every one, two, three or four hours.

Dr. Bartholow says the above gives relief in a few minutes, and sometimes the relief is permanent.

SKULLCAP FOR ENURESIS is highly recommended by Dr. Wimermark in the *New York Record*. For a child of twelve years he gives one teaspoonful of the fluid extrat. t. i. d.

COUGH MIXTURE.—(Cook County Hospital, Chicago.)

Morphiæ sulph..	gr. i.
Tr. aconite.....	gtt. xvi.
Potass. nitrate.....	dr. j.
Acid hydrobrom., dil.....	gtt. xvi.
Syr. ipecac	dr. ij.
Syr. scilla.....	dr. vi.
Water.....	q. s. ad. oz ij.

Teaspoonful every three or four hours.

CHRONIC DYSENTERY.—(*Ibid.*)

Morphiæ sulph.....	gr. j
Ferri sulph.....	gr. xvi.
Sulph. acid. dil.....	dr. ss.
Magnesiæ sulph	oz. ss.
Water.....	q. s. ad. oz. ij.

SAGE'S CATARRH REMEDY.—

℞. Hydrastis canadensis.....	grs. v.
Indigo.....	grs. ss.
Camphoræ pulv.	
Acid. carbolic.....	*aa* grs. ij.
Sodii chlorid	grs. l.

Powder the camphor by means of a drop of alcohol, and mix with the salt previously reduced to a moderately fine powder; rub the indigo and carbolic acid together, mix with the salt and camphor; and lastly add the powdered hydrastis, and intimately mix, without much pressure, in a mortar. —*Chicago Med. Times.*

THE TREATMENT OF ACUTE LARYNGITIS.

Dr. John M. Keating tells us in the *Archives of Pediatrics* that he has frequently found the following treatment very efficacious:

"In conjunction with a hot foot-bath, the temperature of the water as hot as the hand can bear with comfort, and the feet afterwards wrapped in flannel or Canton-flannel night-drawers with the feet of extra length, and sewed up at the extremities, he prescribes the following in a half tumberful of water: ℞. Tinct. aconi. rad. gtt. iij.; spts. ætheris nit. dulc., ʒ j.; syr. scillæ co., ʒ j. This is given in frequently-repeated dessert spoonful doses throughout the night. A soft handkerchief wrung with ice-cold water and surrounded by a silk one or a piece of flannel is applied.

If the cough continues, and becomes bronchial it is well to produce a certain amount of counter-irritation of the chest. Ordinary camphorated oil is about the best. In addition to the ipecac, we should recommend small doses of castor oil, the object being to relieve the congestion of the bronchial mucous membrane by acting on the

BRIEF NOTES ON THE TREATMENT OF ACUTE CORYZA.

By SOLOMON SOLIS-COHEN, A.M, M.D.
Chief Clinical Assistant, Out-patient Laryngological Department, Jefferson Medical College Hospital. Read before the Philadelphia Laryngological Society.

It is related of a celebrated French physician that, when asked how he treated a cold in the head, he replied, "With contempt." That some colds may be safely treated in this manner, universal experience will testify. That many attacks of acute coryza cause pain and distress sufficient to demand the best efforts of the physician for their relief must be not alone within the observation, but among the personal experiences of all. The writer has had occasion to test the methods here related upon his own person, and can, therefore, speak with a realizing sense of the relief afforded from annoying symptoms. The property possessed by belladonna, of checking secretion from mucous surfaces, long ago suggested the employment of this drug in acute coryza. I have however, been unable to find any reference to it in the treatises of Mackenzie or Bosworth, the most recent works published in the vernacular upon the special subject of diseases of the upper air passages.

Dr. Beverley Robinson,* of New York, speaks highly of the local use of a powder of belladonna leaves, morphine sulphate, and acacia, but does not mention the internal administration of the drug. J. Solis-Cohen † alludes favorably to the use of the tincture of belladonna in doses of twenty minims. M. Gentilhomme ‡ reports that he has succeeded in arresting the disease in several bad cases, attended with abundant secretion, fever, and embarrassment of respiration, by the use of atropine sulphate in doses of one-half milligrame given at the commencement of the inflammatory period. My own experience with atropine has been equally fortunate. It must be given early in the attack, and when so given is veritably abortive in nine cases out of ten. I have tried several methods of administration, employing granules and triturates of $\frac{1}{100}$ gr. and $\frac{1}{200}$ gr., and a solution of one grain of the salt to the ounce of water, of which the usual dose is four minims (gr. $\frac{1}{200}$). The latter method is preferable with patients upon whose discretion we can fully rely, and to whom we feel no hesitation in entrusting a prescription for a poisonous drug. With other individuals it is safer practice to hand the patient three or four triturates or granules of the dose desired, writing explicit directions as to their use upon the envelope containing them. The manner of using the remedy which has proved most efficacious is to administer $\frac{1}{200}$ grain at the first interview (if this be on the first or second day of the attack), and to repeat the dose in four hours, provided there be no dryness of the throat. The rule for the third dose is the same; dryness of the throat or dilatation of the pupils being the indication to stop the remedy.

When a case is seen during the first twenty-four hours, two doses will often bring the affection under such complete control that the patient does not resort to any further medication. Secretion of thick, yellowish mucus, requiring the occasional use of handkerchief, will, however, usually persist for about a week, but there is, ordinarily, no embarrassment to breathing. Sometimes it is necessary to repeat the dosage in the same manner on the following day, the indication being renewal of watery discharge, suffusion of the eyes, and more or less "stuffiness" of the nose. In order to secure the full therapeutic benefit of the atropine in severe cases, it must be pushed until the physiological effect is produced; that is, dryness of the throat and dilatation of the pupil. One patient complained of the former symptom, that it was worse than the disease. In one case, $\frac{1}{10}$ gr. of pilocarpine hydrochlorate was administered by the mouth, with the effect of relieving the unpleasant sensations. Ordinarily, however, the dryness is readily overcome by allowing a few pellets of ice to melt in the mouth, or by rinsing the mouth from time to time with cold water.

More recently the effect of cocaine in emptying the engorged venous sinuses of the nasal mucous membrane, first prominently called to professional attention by Dr. Bosworth, * has led to its employment in the treatment of acute coryza. While the relief is almost immediate, even in cases where there has been great obstruction to breathing, the effect passes away in from two to three hours, and the drug is too expensive to * use as often as may be necessary. I have found the fluid extract of erythroxylon to be equally efficacious, if instilled into the nose in sufficient quantity. The alcohol of the fluid extract is, however, objectionable, producing considerable smarting. An effusion can be made of equal strength † by the addition of a small quantity of glycerine, and by this means we get rid of all unpleasent effects not inseparable from the drug. The employment of a preparation of coca will give excellent results in connection with the atropine treatment. The patient is given a glass "dropper" slightly curved at the end, such as is used by oculists, and instructed to flood the nose with the infusion of coca whenever it becomes "stopped up." He is directed to draw the medicine back into the throat, in order to make sure of reaching the posterior ends of the turbinated bodies.

* A Practical Treatise on Nasal Catarrh, New York, 1880, p. 600.

† Diseases of the Throat and Nasal Passages. Second Edition. New York, 1879, page 336.

‡ *Union Medicale*, September 4, 1883; *Medical and Surgical Report*, December 15, 1883, p. 66.

* *Medical Record* (New York) November 15th, 1884.

* This objection, in the interval between the reading and the publication of this paper, has been obviated.

† Mr. Stedem, of Philadelphia, makes an infusion of coca, two grains to the minim. I am indebted to Dr. Jurist for a specimen of this preparation.

While not denying the advantage of the good old methods of treating acute coryza with Dover's powder, foot-baths, etc., I am convinced that the plan above described, namely, small doses of atropine pushed to the point of physiological effect, with local use of cocaine or infusion of coca, will be found the most convenient and effective for the majority of cases. Like everything else, even quinine, it will sometimes fail. In one case of acute coryza I tried pilocarpine, producing but slight perspiration, but apparently curing the cold. As my experience is limited to this one case, which may be an example of *post hoc*, and not *propter hoc*, I do not claim anything for the treatment. In all cases, however treated, a brisk saline cathartic administered at the outset is found of the greatest advantage.

Where cases are seen too late to employ atropine with advantage, good results have sometimes been obtained from ammonium salicylate in doses of ten to fifteen grains, repeated every second hour until *tinnitus aurium* is produced. Salicin Salicylic acid, and sodium salicylate have not seemed to be equally efficacious with the ammonium salt.

In a few cases of influenza, in which the coryza, has been quite severe, in some of which there has been much conjunctival distress, and in all of which headache and lassitude have been marked, though the febrile symptoms have been mild, cinchonidine salicylate has apparently been of great benefit, while the infusion of erythroxylon has been of inestimable value in relieving the distress occasioned by the nasal symptoms.—*College and Clin. Record.*

THE ELEMENTS OF PROGNOSIS IN BRIGHT'S DISEASE.

Dr. Austin Flint read a paper with this title before the Medical Society of the County of New York (*N. Y. Med. Jour.*, December 5). In the popular mind the name Bright's disease at the present time had a prophetic import not unlike that of a verdict of conviction after a trial for life. It was regarded as a hopelessly fatal malady. This prevailing impression reflected the views of the medical profession, that a fatal termination would invariably take place, sooner or later. This view accorded with our pathological knowledge and clinical experience. But the scope of prognosis was not limited to recovery from the disease. A disease might involve more or less irremediable damage to important organs, but, after having progressed to a certain extent, the damage might not become greater, and the remaining healthy portion of organs might be sufficient for all purposes of life and a perfect state of health. Again, a disease might be progressive, but so slow as not to be opposed to long life and general good health. But in chronic disease the danger to health might depend upon associated affections, or chronic disease might be tolerated, provided the conditions were favorable; otherwise it would prove fatal. Was the disease acute or chronic? Assuming the existence of acute Bright's disease, experience taught that, exclusive of the important concomitant affections, it did not end fatally as a rule, and did not result in any permanent renal lesion. In other words, the acute was not followed by the chronic disease; but exceptionally it ended fatally or in the chronic form. In some cases the acute disease was not marked; it continued for some time and ended in recovery. Here he would substitute for the word acute, subacute. In some cases the question would arise, whether the disease was subacute or chronic; and the diagnosis could only be definitely settled in favor of the subacute form by the disappearance of every evidence of renal disease after some weeks, and the recovery of health.

The author then considered some of the elements of prognosis in cases of chronic Bright's disease. What were some of the conditions requisite for latency? 1. The kidneys must not be damaged beyond a certain degree. 2. The important organs of the body, other than the kidneys, must be capable of performing their respective functions satisfactorily. 3. The laws of health relating to alimentation, exercise, etc., must be observed. Suppose these conditions to be fulfilled, and a lesion of the kidneys to exist which diminished their functional ability one-half, and the disease was not progressive; life and health would be compatible with the existence of chronic Bright's disease for an indefinite period. In order that chronic Bright's disease should be well tolerated, the treatment should relate to accessory conditions required for bringing about toleration, those conditions relating to other organs of the body and to general hygiene. The kidneys in this condition were incapable of meeting an additional demand on their functions. Should the patient fail to observe the accessory conditions mentioned, the inefficiency of the kidneys would become manifest in headache, misty vision, nausea in the morning, impairment of the appetite, and general debility. Examine the urine in such a case, and evidence would be found of chronic Bright's disease which had probably existed for years, the progress of the renal affection at length rendering the organs incapable of performing their functions properly, which caused attention to be directed to the state of the kidneys. It was important, in determining whether the kidneys eliminated excrementitious matters sufficiently not to endanger the health, to make a thorough examination of the urine, not alone with regard to the presence of albumen and casts, but also as to the amount of urine eliminated daily, its specific gravity, and the proportion of the salts. The quantity of the urine might be increased while the specific gravity was so low as to involve great danger from uræmic toxæmia. Suppose the examination of the urine in a case of chronic Bright's disease showed renal adequacy; how should that fact influence the treatment? In this way, that diuretics, sudorific and hydra-

gogue cathartics, would not be indicated; indeed inasmuch as their influence was debilitating and opposed to the accessory conditions for health just mentioned, they were contra-indicated. Was the degree of renal adequacy, as determined by an examination of the urine, reliable in judging of the absence of danger from toxæmia? This question was to be answered in the negative. In some cases of Bright's disease the quantity of the urine was decreased for a long period without serious consequences. The explanation lay in the fact that the excrementitious matter was eliminated vicariously, or its effects upon the system were counteracted by other agents. On the other hand, slight inadequacy, without vicarious elimination and counteracting agents, sometimes led to serious consequences. The prognosis after coma was always grave, yet we meet with cases repeatedly in which life was preserved for a long time. Of acute pulmonary œdema the same might be said as of uræmic coma. In his experience the most serious consequence of Bright's disease was dyspnœa, or renal asthma, apparently due to toxic effects upon the respiratory center. He had never known such a case to end in recovery, but he had known life to be prolonged for several years after dyspnœa from pulmonary œdema occurring in the course of chronic Bright's disease.

Recapitulating, Dr. Flint said that subacute diffuse nephritis, having the same seat and characters as acute Bright's disease, exclusive of acuteness, occurred not only after scarlet fever and other fevers, but irrespective of these; and when it occurred as a primary affection, or in connection with other diseases, it was liable to be overlooked, or, if recognized, to be mistaken for the chronic form. Further, acute or subacute diffuse nephritis not infrequently occurred as an intercurrent affection in the course of chronic Bright's disease, and rendered the prognosis temporarily more serious. The disappearance of symptoms and the presence of health did not necessarily indicate that the chronic disease was not still in existence. Again, a susceptibility to the causes of inflammation of the urinferous tubules, irrespective of the existence of chronic Bright's disease, was to be recognized as an individual peculiarity.

TREATMENT OF ABORTION AT THE FOURTH OR FIFTH MONTH, WITH RETAINED PLACENTA.

Dr. G. R. Southwick of Boston, (in the *Am. Jour. Obs.*) gives us a very interesting paper on this subject in which he points out the change in the medical fraternity during the last few years on this subject from the expectant treatment to the radical plan of dilating the cervix and removing the secundines immediately, and very pertinently puts the query as to whether or not the pendulum of progress might not have swung too far to the opposite side from the old but easy expectant idea. He says when the labor takes place at full term the uterus contracts away from the placenta, which is a more contractile body, and thus separation takes place. The uterine muscular tissue continuing in this contracted state constricts the sinuses and hemorrhage is prevented. Thrombi form back of these constrictions and when the uterus partially relaxes in twenty-four hours, serve to plug the vessels and in turn also prevent hemorrhage. But when abortion takes place in the middle of gestation, the muscular tissue of the uterus has not reached that degree of development, and becomes ready for the metamorphosis which takes place at full term. The surface contraction is less in proportion, *i. e.*, there is less contraction to the square inch of surface, and consequently separation of the placenta is less likely to follow, both for this reason and on account of its firm attachment. Thrombi therefore do not form so rapidly, and hemorrhage is liable to ensue though not so severe as under similar circumstance at term.

In some rare cases small portions of adherent placenta become organized and a fibroid polypus hydatidiform mole develops. In nature's method of removal the blood-vessels are closed behind the adherent portions, the placental tissue gradually disintegrates and is cast off; here another element must be considered—the danger of septicemia.

Retention of a part or the whole of the placenta is, therefore, liable to give rise to one of the following complications:

1. Hemorrhage, either immediately and profuse or remote, and become continuous in small quantities.
2. Septicemia.
3. Some intra-uterine growth.

The aim of treatment is to prevent or forestall them, and may be active or conservative. Active treatment consists in the immediate removal of the secundines in every case, either by the finge, placental forceps, or curette. There is good reason to fear the results of traumatism, as inflammation of the uterus and cellular tissue, or even perforation of the uterus, especially when performed by an unskillful hand, which is not infrequently the case. Very often the removal of placental tissue is tedious and accompanied with considerable hemorrhage.

If no urgent symptoms be present the Doctor thinks it is well to see what conservative treatment will do, or plug the vagina for a few hours, and often on removal of the tampon the retained secundines are easily delivered.

It sounds very easy to read that, to remove the placenta, the uterus is to be pressed down in the pelvis with one hand externally while the forefinger of the other enters the uterine cavity, passes up over one side of the placenta and down on the other so as to hook it down and extract it from the uterus, but it is a very different thing to do it.

The pelvic tissues being tender and painful, the abdominal walls being quite thick, the uterus being high up, and the os contracted and small, the operator's fingers being short, or, when the uterine cavity is reached, the attached placental tissue

being high up in one horn of the uterus, extremely slippery and persists in gliding from beneath the finger, and yet does not come away, any or all of these complications, soon exhaust the Doctor's strength, the patient's good nature and forbearance, and lays the foundation for pelvic inflammation, besides endangering the patient to the introduction of septic germs during the process of this manipulation.

But if any of the three complications mentioned above should ensue, then of course there would be no alternative other than active interference and emptying the uterine cavity.

To prevent hemorrhage he suggests the tampon as temporary means, as, after the most careful plugging, the plug becomes compressed and blood escapes around it as before. It is important to remember that no portion of the tampon should protrude between the labia, as it would almost certainly be forced out by muscular action. The plug may extend into the cervix. It serves the double purpose of promoting uterine contractions and expulsion of the secundines, as well as temporary control of hemorrhage; and avoids the necessity of radical measures unless symptoms of sepsis ensue.

The next danger, and the most to be dreaded, is septicemia. As this most probably is a result of the introduction of septic germs from without in some manner, by the hands, or instruments cr air, it goes without saying that the physician should never attend such cases immediately after visiting a case of scarlatina or other zymotic diseases without the most rigid antiseptic precautions. When symptoms of septic infection present themselves, they should be treated the same as septic fever from any other origin; rigid cleanliness by intra-uterine douche, control of temperature, etc.

The third complication is so rare it only needs to be referred to as a sequela and treated as an independant subsequent incident, when menorrhagia and metrorrhagia require the use of the curette, placental forceps or sometimes the ecraseur.

ON SOME NEW MEDICAMENTS.

At the recent meeting of the Society of the Medical Staff of the Royal Charité Hospital, Prof. Senator gave a summary of newly-discovered medicaments, reported in the *Berl. Klin. Wochenschrift*. He drew a comparison between the innumerable medicines as such and their value as medicaments, and pointed out that, although the advance made with regard to specific medicines for directly curing diseases was small, yet great progress has been made with regard to those which act symptomatically. This, he said, was of great value, for by their means the pains of many incurable diseases can now be diminished, and troublesome and threatening symptoms in curable diseases can be prevented or removed. Dr. Senator then gave a brief account of his own experiences of some exotic medicaments, that have as yet received little attention in Germany. Of purgatives, he mentioned tincture of cascara sagrada, euonymin, and trisin. The tincture of cascara sagrada he considers a non-irritant and very certain remedy. One great advantage it possesses is that it can be taken for a long time without disadvantage. Dr. Senator prefers it to senna, because it is effective in smaller doses. With regard to euonymin, Dr. Senator refers to Rutherford's valuable experiments on its physiological effects, and mentions that it is used both as an aperient and as a cholagogue; but as a cholagogue he says it is difficult to form an opinion. At any rate, it is a certain and very drastic remedy, and for this reason cannot be taken continuously for a long period. From his own experience, Dr. Senator said he had nothing to communicate about trisin, but he considered there was not much reason for introducing it. He then mentioned two narcotics, extract of piscidia erythrina and hydrochlorate of cocaine. The extract of piscidia erythrina, recommended since 1845 in America as soporific, he has found very useful for neuralgic pains in the head, given in an evening in doses of about four and a half to eight grains. Hydrochlorate of cocaine he had applied with success to the mucous membrane of the urethra and the rectum, especially in connection with diseases of the bladder. As a remedy against the immoderate perspiration of phthisical patients, Senator mentioned picrotoxin, which he tried on the recommendation of Dr. W. Murrell. He had tried it in forty cases, in two-thirds of them with success. On the whole it was found to be almost as certain a remedy, as atropin or agaricin. Agaricin was used in the Giessen clinic as a substitute for atropin in 1883, and found to be preferable to the latter in this respect, that it could be used for a longer time.

HOW TO TREAT WOUNDS OF THE FINGERS.

Every physician, no doubt, feels satisfied that he knows perfectly well how to treat finger wounds, yet Dr. John Kent Spender seems to think that he knows enough original about the subject to warrant him in publishing an article in the *British Medico-Chirurgical Journal* for June. He believes in properly dressing such wounds, and then *letting them alone*, and the prime element in his proper dressing is the *absolute exclusion* of air. To illustrate his method, he relates the case of a man whose third and little fingers were cut by machinery; the last phalanx of the third finger was almost separated. The flow of blood was checked with circular pledgets of lint; next he fastened the arm and hand to a board, and suspended the whole limb in a sling; and the last step of these preliminary proceedings was to send the patient home to recover from the shock, with the help of warm food and a little sleep. Four

hours afterwards he visited him, and dressed the injured fingers in the following way:

Firstly, the pledgets of lint, stiffened with dry blood, were soaked in water and gently removed. No foreign body of any kind was found. The fingers were thoroughly cleansed, the nearly separated portions were brought into juxtaposition and retained *in situ* while a circlet of boric lint was applied. Each finger was laid upon a bed of absorbent cotton-wool tissue, which just met on the dorsal side; then a lilliputian bandage of thin, soft calico was put around, with moderate pressure, and the turns of bandage were brushed over with the gum acacia mucilage of the British Pharmacopœia. Finally, each finger was put into a cradle of gummed paper, which was moulded while soft, and then dried in the gradual heat of an oven. These light and simple shields kept the fingers apart, and guarded them from further accident.

The wounded fingers were not undressed until eleven days had elapsed from the date of the accident; and when exposed to view the healing was found to be complete, and the fingers were of their natural size (though of course a little shorter than before the injury). The tender cicatrices were protected for a few more days with ordinary plaster, and the work was finished.—*Med. and Surg. Rep.*

CANCER OF THE UTERUS.

The following is taken from a clinical lecture by William Goodell, M.D., published in the *Medical Bulletin*, August, 1885. The patient was thirty-nine years of age, and had five children, the youngest eleven years of age.

There are three forms of cancer which may attack the uterus: scirrhus, epithelioma, and encephaloid, but there is no doubt that they merge one into the other. The practical question is not so much, is the tumor scirrhus, epithelioma, or encephaloid cancer, as it is a question whether or not the growth is malignant. There is only one thing about this differentiation, and that is that epithelioma is more amenable to treatment than either of the other forms. In the vast majority of cases when cancer attacks the uterus it takes the form of epithelioma. There are some cases which seem to begin as scirrhus, and ultimately break down into the epithelial form.

There are certain popular fallacies about cancer of the uterus. One is that it is always accompanied with pain. Carcinoma of the neck of the womb does not always produce more pain than most women experience at each period. It is only when the disease advances toward the internal os that pain is felt. When it ascends and invades the cavity of the womb the woman's sufferings are very great. You see in our practice in the dispensary the same thing. We hook tenacula into the cervix and apply powerful caustics without eliciting any sign of pain. Under some circumstances, just as cartilage, which is normally insensible, may become excessively tender, so the cervix of the womb will, under certain circumstances, become very sensitive, and the slightest touch will cause the patient to flinch; but, as a rule, in cancer limited to the neck of the womb there is no pain. There may be leucorrhœa and that will certainly be if there is an open sore. This is a very common delusion. Old physicians have said to me, "O, no, doctor, it cannot be a cancer, there has been no pain." The idea of cancer is associated in their minds with lancinating pain, which cuts like a knife. When carcinoma invades external portions of the body which are well supplied with nerves, these pains are present. The sensitive portion of the womb begins at the internal os, and the lining membrane is very sensitive.

Another fallacy is that there is, in every instance, the cancerous cachexia. This is a great mistake. My impression is that one-half of the cases which come to me do not present the cancerous cachexia. Instead of being lean, bony, and scrawny, with the leaden hue of the countenance, many of these cases present a buxom appearance, with rosy cheeks. It is my experience that such cases are less amenable to treatment, and operation is less liable to be followed by temporary benefit, than in those cases which present the appearance of the patient before us. In our patient, if the disease were limited to the cervix, I should expect that the operation would do a great deal of good.

Again, cancer may exist without bleeding. Before ulceration occurs it is not present, and even in the vegetating form it may be absent, although there is usually some discharge. This discharge need not be offensive, and this is another point which it is well to bear in mind.

I wish now to give you a little history of this case. She comes from a distance, and was brought here by her husband in great distress of mind. She had been told that she had a cancer. My own rule, to which exceptions are very rare, is never to tell a woman that she has a cancer. I speak of it as a bad ulceration. Many of my patients have known in their hearts that they have a cancer, and know that I know it, and yet the word "cancer" never passes our lips. Many women say to me, "Now, Doctor, if I have a cancer do not tell me." I advise you to adopt the rule which I follow. I do not want you to lie about it, but never tell a women that she has a cancer if you can get out of it.

This woman came in a very painful state of mind. As a drowning man will grasp a straw, so she was willing to embrace anything that would do her good. She tells me that she has five children and cannot bear to think of leaving them. I said to her, "While I cannot cure you, I may be able to do something which will do you a great deal of good." She jumped at the idea, and I have not disillusionized her. She thinks that I am going to do more than I can do.

When I examined her, I found a great excavation. What I thought of doing was to scrape off the vegetations, and, if I dared, cover the part with nitric acid, but a symptom has appeared which shows that the disease has attacked the bladder, and I can do nothing for her. Three days ago she began to pass blood from the bladder. The urine does not trickle into the vagina, because there is no opening as yet, but the disease has involved the bladder, and in the course of a few days the tissue will break down, and there will be produced a vesico-vaginal fistula, through which the urine will trickle into the vagina.

There is still one other thing. That woman has not long to live. Her sufferings will, I think, be excruciating. She ought to have as much opium or morphia as will make her comfortable. Some would object to this, saying that she would get into the opium habit. She will not live long enough to contract the habit. I say let us make the last end of her life as comfortable and peaceful as we can. Give her opium in any form or amount that she chooses to take it, exercising a little restriction in the begininng.—*Med. Journal.*

CASE OF CÆSAREAN SECTION AFTER DEATH OF MOTHER—LIVING CHILD REMOVED.

By J. Mack Hays, M.D., Oxford, N.C.

¶ A short while after 8 o'clock on the evening of the 3rd of October I was hastily summoned to the wife of Mr. C., living seven miles distant. On reaching the house I was informed that the patient was too far gone for me to do her any good. The following history was briefly given me: about four hours previously Mrs. C. was in the yard looking after her domestic affairs and enjoying, apparently, her ordinary good health, when she was suddenly attacked with a violent headache and sent for her husband at the mill, a hundred yards distant. When he reached the house she told him to send at once for the doctor, as she felt very sick and her head hurt her terribly; then, throwing her hand to the back of her head, fell on the bed with the exclamation, "I can't stand it!" She was speechless from that moment, vomited frequently for some little time, several times threw her left hand to her head, and sank rapidly into the condition in which I found her. She was evidently suffering from an extensive cerebral apoplexy, presenting the following symptoms: Complete motor and sensory paralysis of left side of face and right side of body, both pupils widely dilated and totally insensible to a bright light; very slow, stertorous breathing and "drawing in of the paralyzed cheek with inspiration and its puffing out with a sort of explosion in expiration;" pulse rapid and barely perceptible; face pallid. A sharp pinch on the non-paralyzed arm produced no evidence of sensation, nor did the hypodermics of whiskey which I administered as a forlorn hope. The patient was rapidly approaching her end, and was eight and one-half months advanced in pregnancy. I satisfied myself from the husband that the child was probably alive, as he had heard his wife speak of having felt motion the same day. I then laid the case clearly before the husband, telling him that while one life was fast passing away, another was at stake which might be saved even after the mother had breathed her last. He told me to do as I thought best. Accordingly I made the necessary preparations, and, after all evidences of life had disappeared in the mother, and the bystanders sent out of the room, I proceeded without delay with the operation. With one stroke of my scalpel I incised the skin and subcutaneous tissues from the umbilicus nearly to the symphysis pubis; two incisions more, through the linea alba and peritoneum, exposed the uterus to full view; through it I next made an opening as low down as possible and of sufficient size to admit my two fingers, at the same time liberating the liquor amni. Using my fingers as a director I slit up the uterus to the placenta, which I easily detached. The body of the child was now fully exposed, lying in the second cranial position. I lifted it from the uterus, and by exerting some little force to overcome the suction brought to bear upon the head, removed a living male child from its dead mother. The cord was tied and cut as usual. The operation was attended with very slight loss of blood, and that of a dark venous character.

The unusual shape of the child's head, born without any pressure having been made upon it, was quite noticeable.

The child is being fed on fresh cow's milk, diluted and sweetened, and at the present writing (October 15th) stands a fair chance of being raised.

A NEW METHOD OF REDUCING DISLOCATIONS OF THE HIP.

(Dr. J. S. Allen *in the Annals of Surgery.*)

An anæsthetic having been administered to the extent of producing complete muscular relaxation, the surgeon stands over the recumbent patient, flexes the leg upon the thigh, and the thigh to a right angle with the body, brings the patient's foot between his legs so that the dorsum of the foot rests upon the operator's nates, and then the surgeon, passing his right arm beneath the flexed knee, lifts the hips of the patient well from the bed or floor, and holds them thus suspended for a short time; the head of the femur will quickly be drawn back into its socket. The weight of the hips and opposite leg rotates the body outwards, producing just sufficient abduction and extension to draw the head of the femur quietly through the slit in the capular ligament, and direct it into the acetabulum.

The present writer can bear witness to the efficiency of this method, having practised it successfully on the 4th of May, 1885, in a case which had resisted the usual method of reduction

THE TREATMENT OF ASTHMA.

By Dr. Paul Rodet.

Translated from *L'Abeille Med.* by F. R. Campbell, M.D.

1. Treatment of the Attack.—The principal indication is to relieve the dyspnœa. For this purpose, the following remedies may be employed, given in the order of their efficiency:

(*a*) *Injections of Morphine.*—These rapidly relieve the attack and produce a quiet sleep, but it is necessary to gradually increase the dose. It should be used with great caution, for fear of inducing morphinism.

(*b*) *Inhalation of Iodide of Ethyl.*—Direct the patient to pour ten or twelve drops on a handkerchief and inhale slowly. This drug rapidly relieves an attack, sometimes instantanously. These inhalations are much to be preferred to those of ether or chloroform, which usually fail.

(*c*) *Ammoniacal Vapor.*—This produces a sedative effect by exciting an excessive secretion in the nose and throat. Many patients are relieved in this way.

It has also been proposed to touch the pharynx with a strong solution of ammonia. A certain amount of inflammation with an abundant secretion is thus produced. This method of treatment sometimes affords excellent results.

(*d*) *The Inhalation of Medicated Fumigations.*—These act upon the bronchial mucous membrane. Nitre papers burned in a saucer near the patient, are much employed. The leaves of acrid narcotic plants, such as stramonium, belladonna, may be smoked in cigarettes alone, or with a small quantity of nitre. Cigarettes made of belladonna leaves, containing arsenic, are also prescribed. These means are beneficial only for a limited time.

2. Treatment of the Disease.—Seek out the causes which produce the attack, with a view to changing the occupation or surroundings of the patient, if necessary. The medical treatment will vary, according to the variety of asthma.

(*a*) *Catarrhal Asthma.*—Avoid cold; treat the laryngitis and bronchitis by ordinary methods, emollient drinks, ipecac and opium, and cutaneous revulsion. If the asthma is not of long standing, Hardy recommends the application, on the chest and arms, of a vesicatory or rubefacient. Tincture of lobelia, thirty to sixty drops a day, is considered an excellent remedy by the Germans.

The waters of Royat or Cauterets and a winter residence in the south, at the seaside, may be tried.

(*b*) *Nervous Asthma.*—Bromide and,above all, iodide of potassium produce excellent effects, although we do not know the rationale of this treatment.

Unroasted coffee, a tablespoonful to be infused in a cup of water over night, and taken at one dose in the morning for several months, may be tried.

Compressed air is an excellent remedy. The same results may sometimes be obtained by playing the cornet or blowing a trumpet, thus producing a distension of the bronchia. Gymnastic exercise of the upper extremities should be ordered for those of sedentary habits. Hydropathic treatment may be employed with patients who do not cough.

(*c*) *Herpetic Asthma.*—That is, cases in which the asthma alternates with attacks of skin disease. Employ the hygienic and therapeutic remedies mentioned above,and, in addition to these, arsenic. Counter-irritants, where the eczema has disappeared. Mont Dore water to be preferred to those of Bourboule, which are better for the scrofulous.—*Buffalo Med. Journal.*

JAUNDICE AND PAIN IN BILIARY COLIC.

Dr. Lawson Tait, in the *Lancet*, discusses the reason why, during the passage of gall-stones, there is frequently no jaundice. In fifteen cases of cholecystotomy he found no history of jaundice, and Dr. Tait has found that the occurrence of jaundice, either in the skin or in the urine, during and after the passage of gall-stones, is of extreme rarity, and not, as has been believed, common. Dr. Tait seeks for an explanation of this fact in the following anatomical conditions of the cystic and common ducts. The common duct is not so long(three inches) as most text-books assert, and is much less rigid and more easily dilatable than the cystic duct, which is larger than most of the text-books describe it, viz., one inch. Hence we can understand how a stone, if not of very great size, will cause intolerable agony while passing through the unyielding cystic duct, and without a trace of jaundice ensuing, the gall-bladder alone being its propellent force; but the moment it enters the common duct the extending impulse will be increased by the influence of the whole excreting force of the liver, so that its passage through the common duct is more rapid. The chief symptom, then, that of pain, is due to the slow passage of the calculus through the unyielding cystic duct, while its rapid passage through the easily distended and much larger common duct gives no time, in the majority of instances, for the production of jaundice, which only takes place after long-continued obstruction of this, the common duct.

LEUCORRHEAL DISCHARGE FROM ROLLER-SKATING.

Dr. Von Klein in the *Boston Medical and Surgical Journal*, writes that he has found in a number of instances leucorrheal discharges produced in young girls by the excessive exercise consequent upon the practice of roller-skating. He adds that he has reason to believe that the practice of roller-skating is injurious to young females by reason of the excessive movements of the lower extremities, and of the pelvic organs, including the walls of the vagina.—From the *Weekly Medical Review.*

SANTONINE IN AMENORRHŒA AND DYSMENORRHŒA.

Dr. J. Cheron in the same journal recommends santonine in certain cases of amenorrhœa and dysmenorrhœa, especially if combined with adynamia, anemia and chlorosis attending the onset of the menses at puberty. Santonine as an anthelmintic acts by causing a lively peristaltic action of the intestines, through which the worms are expelled. The author therefore compares its action to ergot, like which it acts upon the vascular system. It is consequently indicated in certain forms of chronic congestion where the amenorrhœa or dysmenorrhœa is of a passive, adynamic type, where it not only relieves the utero-ovarian congestion but also improves the nutrition. For it has been shown that whilst ergot nauseates the stomach, santonine improves the digestion. He prescribes two grams, to be divided into forty pills, of which two are taken before each meal (about one and a half grains at a dose), or it may be given in a mixture of alcohol (to dissolve the santonine) and syrup, each tablespoonful containing 0. 65 grams (one grain). One to two tablespoonfuls before each meal.

BELLADONNA AND IODIDE OF POTASSIUM.

The fact that belladonna produces dryness of the throat, nose and mouth has induced Dr. Aubut to try it rather empirically to combat certain disagreeable effects of iodide of potash, and he has published his results in the *Lyon Medical*. In three cases of naso-pharyngeal intolerance of the iodide a mixture of belladonna with iodide of potassium has given good results. He had also the same success in a young man suffering from acute iodism, in whom he made this symptom disappear by preceding the administration of iodide of potassium by the extract of belladonna. The dose was two pills of five centigrams each of the extract per day, one in the morning and the other at night. In one of the cases he was able to suspend the use of belladonna after some days, continuing the administration of iodide of potassium alone, without producing any intolerance.

VINEGAR IN PUERPERAL HEMORRHAGE.

The editor of the *Revue des Maladies des Femmes* states that it has accidentally been discovered that a large glass of vinegar given as a drink to a woman attacked with puerperal hemorrhage produced immediate contraction of the uterus, and may therefore be employed when ergot is not at hand. Doctor Grigg, acting upon this suggestion, has recommended the use of vinegar to several midwives. He considers it a specific which is of immense value, especially to physicians in country practice.

SOOTHING APPLICATION IN NEURALGIA.

Mayet has presented, before the Société de Thérapeutique, the following formula for a very neat and compact local application for use in neuralgic affections:

Chloral hydrate...	5 parts.
Crystallized menthol.....	5 "
Cacao butter	10 "
Spermaceti.....	20 "

These constituents are mixed into a paste, which is divided into pieces about two-fifths of an inch square, and weighing about thirty grains.

Chloral thus applied in cacao butter has no local irritative effect. The part affected is to be gently rubbed with one of the squares, which is then allowed to melt at the most painful point.—*Journal de Médicine de Paris.*

TRANSMISSION OF PHTHISIS BETWEEN MAN AND WIFE.

Revue de Med. Prof. Potain presents an array of cases to prove this possibility. In each case the subject of contagion was from a healthy family, doubtful cases being excluded, as also where other causes than contagion might explain the disease. Transmission can take place, without pregnancy or other debilitating cause.

I feel sure that it will soon be the general practice of physicians to warn the husband, for example, to occupy a different apartment from a tubercular wife. When the bacterial craze has subsided we will not be so apt to remember this caution.

DELACOUR'S LIP SALVE.

The following is said to be the formula for Delacour's lip salve, a famous French remedy for chapped and cracked lips, sore nipples, etc.: Powdered nutgalls, pomegranate bark, and sumac, of each, 1 drachm; myrtle leaves and sulphate of zinc, of each, 30 grains; wax, spermaceti and oil of sweet almonds, of each, 1 ounce; virgin's milk (dilute tincture of benzoin), 2 drachms; balsam of mecca, 12 drops; unguentum rosarum, 4 ounces; perfume to suit the taste.—*I bid.*

HÆMORRHOIDS.

Duval gives, in the *Centralblatt fuer die gesammte Therapie*, the following formula for an application to hæmorrhoids:

℞	Unguenti camphorati.....	℥ 1
	Pulveris gallarium.....grns.	15
	Plumbi acetatis..... "	15
	Extracti belladonnæ ..... "	8; Mix.

Sig.—Rub on the hæmorrhoids four times a day.

A MIXTURE FOR WHOOPING-COUGH.

A contributor to *Un. Med.* prescribes the following formula :

Tincture of belladonna..... 5 drachms
Tincture of valerian, } each, 75 grains.
Tincture of digitalis, }

For a child two years old, begin with five drops daily ; increase the amount by five drops each day until it reaches thirty drops. The initial dose and the increment are ten and fifteen drops, respectively, for children between two and five years old and for patients who are still older. If the valerian is not well borne, tincture of musk may be used instead. Where nervous and spasmodic symptoms predominate, the author resorts to chloroform, giving to children between two and five years old from six to thirty drops daily, in two ounces of gum julep.

VOMITING OF PREGNANCY.

The latest remedy for the obstinate vomiting of pregnancy is the hydrochlorate of cocaine. Dr. Holtz (*Algem. Med. Wochenschr.*) says that in a case where, everything having failed, he had determined to produce abortion, but at the last moment, thought of cocaine, he gave the patient 10 drops of a 3 per cent. solution, and had the satisfaction of finding the vomiting under control. —*Nat. Druggist.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JANUARY, 1886.

THE ORIGIN OF THE EPIDEMIC.

The sub-committee appointed by the Civic Health Board to enquire into the origin of the late small-pox epidemic have submitted their report. This report consists of replies to certain questions put to persons known to have been connected in some way with the outbreak. From them we learn that previous to the beginning of 1885 there had been no small-pox in Montreal for several years, and that the disease may be definitely traced from one, and perhaps two sources, and from one patient to another until the sequence of cases becomes lost in the widespread contagion of the early summer.

The lay statements in this connection are fairly unanimous, but it must be a matter of regret to the profession to learn that the stories of the two medical men who ought to know most about the matter—Drs. Hingston and Rodger—differ entirely and radically on important questions of fact. In the absence of evidence it is not our intention to take either one side or the other of this unfortunate controversy.

Dr. Hingston's letter—not embodied in the committee's report—is largely a reply to Dr. Rodger's statements, and we leave it to the professional friends of both these gentlemen to draw their own conclusions from these published letters.—To those who have not had an opportunity of seeing them, and in fairness to Dr. Rodger, it must be plainly statad here that he informed Dr. Hingston of his belief that the case he (Dr. H.) was asked to admit to the hospital was one of variola, that he knew that the patient Longley, a Pullman car conductor on the Grand Trunk Railway, had been exposed to the disease in Chicago ; that he reported the case to the Health Authorities as a case of small-pox ; that the case had been diagnosed independently in the Montreal General Hospital as small-pox, and that it ultimately turned out to be one of small-pox. Notwithstanding this, the impression is abroad that in the first days of Longley's stay in the Hotel Dieu, the medical men in attendance were generally of the opinion that he was the subject of not variola but varicella: We are not in a position to say whether this impression is correctly founded or not, but whatever may have been the understanding, or misunderstanding, as to the conduct of the case, it may, without fear of contradiction, be asserted that there was inexcusable carelessness displayed in the lack of proper isolation of the patient. We understand that students and other physicians were allowed to see Longley, and Dr. Hingston himself says that another man was allowed to remain in the wards because, forsooth ! he wasn't afraid of the disease ! No wonder the disease shortly afterwards breaks out in another ward, a medical student takes it ; friends of patients who visit the Hotel Dieu get it, and soon the whole Hospital becomes infected.

Dr. Hingston emphasizes the fact that he had a care of ventilation in the ward, but the subject

of isolation, in the scientific sense, is entirely ignored. We do not believe that it was carried out. Shortly after this general infection of the Hotel Dieu it was not only considered inexpedient to admit any more patients, but it was also decided to close the institution and to send to their homes those who had previously been under treatment. The result of this determination upon the part of the Hotel Dieu authorities may easily be anticipated; each patient discharged from the Hospital —all impregnated as it was with small-pox contagion—formed a local infecting centre for the propagation of the disease. Had the management of the Hospital put their heads together to determine in what way they could most expeditiously and most thoroughly spread variola throughout this city, they could hardly have hit upon a more effective plan. Instead of vaccinating and quarantining the whole institution they deliberately allowed to go by default the only chance that was left of preventing the further spread of the disease.

It would almost seem as if the enquiry into the origin of the epidemic has served the purpose of averting criticism from the Civic Government. Why was there no permanent small-pox hospital ready for the reception of such patients as Longley and Shattuck? Why was no public vaccination done for a year and a half before the outbreak? Why should there have been any difficulty in getting the Civic Hospital opened?

And the answer to these questions is, that the chief officials of the Sanitary Department were grossly incompetent to deal with the matter of the public health, and because our city council, actuated by petty notions of false economy, refused the necessary funds. Nor, later on, did they grasp the situation, but pallied and procrastinated until the golden opportunity was lost forever.

Montreal has had a bitter experience, and it remains to be seen whether in the future a better record will be shown. Let us hope, with Dr. Hingston, "that it will never again happen in the history of the city that a patient stricken with small-pox will be driven round from pillar to post in the vain search of some place where he can be treated and cared for without endangering the public safety."

BOVINE-VACCINE POINTS.

Messrs. John Wyeth & Brother, of Philadelphia, the well-known pharmacists, have quite recently established a vaccine farm in Chester County, a short distance from that city. The land is undulating, well adapted to grazing, and contains several hundred acres, well watered and wooded. The buildings are all arranged on the latest scientific principles, and the animals and the inoculations have been placed under the immediate charge of Dr. W. L. Zuill, Professor in the Veterinary Department of the University of Pennsylvania. The virus with which the Messrs. Wyeth have started their inoculations was obtained from the Vaccine Bureau, under the auspices of the Belgian Government, in the City of Brussels. The high standing which the firm of John Wyeth & Brother have with the profession in the Dominion of Canada will at once commend to them the vaccine which they produce. The Davis & Lawrence Co. of Montreal are the agents for Canada.

We observe that Dr. Piffard has retired from his editorial connection with the *Journal of Cutaneous and Venereal Diseases*. The Journal will be continued under the sole editorial charge of Dr. P. A. Morrow. We may remind our readers that this is the only publication in the English language devoted to Skin and Venereal Diseases, and during the three years of its existence it has won for itself a high reputation for scientific excellence as well as practical utility. In addition to presenting all that is new and valuable in these special departments, the colored lithographs and wood engravings with which the original articles are illustrated are worth more than the price of subscription.

Judging from the handsome appearance of the January number, which is enriched by an admirable chromo-lithograph and a number of well-executed woodcuts, and the eminently practical character of its contents, this high standard will be maintained in the future.

LACTOPEPTINE.

We have used this article extensively for some years in cases of indigestion, and can recommend it as a very valuable remedy. Being a compound of the five active agents which are contained in the process of digestion, it cannot fail to aid the system in preparing the food for assimilation. It is an invaluable remedy in the summer diarrhœa of

children. In this disease, owing to the great impairment of the vital forces, and feeble powers of the digestive tract, food frequently irritates and increases the difficulty. For such cases we know of no agent in the Materia Medica as reliable as Lactopeptine.

PERSONAL.

Dr. Ebbitts, for nearly a year past one of the Resident Assistant Surgeons at the Montreal General Hospital, has received the appointment of Medical Superintendent of the Winnipeg General Hospital, and left the middle of January to enter upon his duties.

Dr. Peter McLaren (M.D., McGill, 1872) was in Montreal the first week in January. Dr McLaren still is located at Ormstown, P.Q.

Dr. Wells of Quebec has been appointed by the Local Government a member of the Central Board of Health, in the place of Dr. Marsden, deceased.

Dr. J. B. Lawford (M.D., McGill, 1879) passed in November last the final examination for the Fellowship of the Royal College of Surgeons of England.

Dr. Wm. Stephen (M.D., McGill, 1882) has left Montreal to practice in Rosana, Argentine Republic.

Dr. Chandler (M.D., Bishop's, 1880, and Gold Medalist) is a rapidly-rising Ophthalmic Surgeon in Boston, Mass., U. S.

Dr. Heber Bishop (M.D., Bishop's, 1883) is practising in Boston, U. S. His address is Hoffman House.

Dr. Gustin, one of the Resident Assistants at the Montreal General Hospital, has resigned and left for the Western States.

Dr. Robertson and Dr. Corson have been appointed Resident Assistants at the Montreal General Hospital.

REVIEWS.

A Reference Hand-Book of the Medical Science: Being a complete and convenient work of reference for information upon topics belonging to the entire range of scientific and practical medicine, and consisting of a series of concise essays and brief paragraphs arranged in the alphabetical order of the topics of which they treat, prepared by writers who are experts in their respective departments. Illustrated by chromo-lithographs and fine wood engravings. Edited by ALBERT H. BUCK, M.D., New York City. Vol. I. New York: William Wood & Co., 1885.

This is the first volume of a series of eight, which is to comprise the set, and a very large and well-stocked book it is of over eight hundred pages. It is gotten up in the style of an Encyclopedia, and the title-page, which we have given in full, gives a very excellent idea of the character of the work. The undertaking is a gigantic one, and the Editor has a heavy task before him, of which he gives good evidence in the present volume of being well able to deal. We have read carefully a few of the principal articles, and are pleased with the style and the conciseness with which important material facts are given. Some may possibly think that some things might with advantage have been omitted—but, upon the whole, the bulk of the contents are entitled to a place in such a book. The engravings are very fine, the chromo-lithographs (several in number) beautiful, the type clear, the paper and the printing not to be excelled. The fact that several Canadian writers contribute to this, and are to contribute to subsequent volumes, will perhaps give it more than usual interest to the bulk of the profession in the Dominion, while to some the fact that they have nearly all been selected from Montreal will not be a point which will commend it to their favor. Personally, we think the Publishers, have made a mistake in not securing the services of men from various parts of the Dominion. Montreal has medical talent and good writers beyond doubt, but when the writers selected in the United States are from so many varied points, it was a mistake to make one city in Canada the source from which to draw its Canadian material.

A Treatise on Diphtheria Historically and Practically Considered, Including Croup and Tracheotomy. By A. SAUNÉ, Docteur en Medicin Ancien des Hopitaux de Paris, Chevalier de la Légion d'Honneur, etc., etc., translated, annotated and the Surgical Anatomy added, with a full-page colored plate and thirty-six illustrations by Henry Z. Gill, A.M., M.D., LL.D., Professor of Operative and Clinical Surgery in the Medical Department of the University of Worcester, Cleveland, Ohio.

The firm of J. H. Chambers & Co., of St. Louis, Mo., have the above work in press, and will in a few weeks issue it to the profession. We have reason to believe it will be a valuable addition to our literature of these subjects.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, FEBRUARY, 1886. No. 5.

CONTENTS.

ORIGINAL COMMUNICATIONS.

Chronic Bright's Disease 401
Weid or Ephemeral Fever 403

PROGRESS OF SCIENCE.

Notes on the Use of Antimonials 405
Modern Methods of Treatment of Pulmonary Phthisis 410
On the Therapeutics of Nasal Diseases ... 414
Treatment of Lupus 416
A New Method for Applying Remedies to the Ear 417
The Treatment of Membranous Dysmenorrhea 418
Bromide of Arsenic in Acne 418
Constipation Habit 419
A Simple Form of Nasal Douche 420
The Treatment of Typhoid Fever 421
Treatment of Croup with Muriate of Pilocarpine 421
Novel Method of Bleeding 422
A New Method of Treating Sprains 422
Catheters 423
Foreign Bodies in the Œsophagus 423

EDITORIAL.

The Small-Pox Epidemic 424

Original Communications.

CHRONIC BRIGHT'S DISEASE.

A Clinical Lecture delivered at the Montreal General Hospital, December 8th, 1885.

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GENTLEMEN.—The patient now before you is 42 years of age, married, and a father. He is by trade a blacksmith, and has been much exposed to heat and sudden chills. His temperament is decidely strumous, and there are on his legs and arms cicatrices of old ulcers, which I believe were of a strumous character. For the past twenty years he has been a hard drinker, going very often on protracted sprees, though at times he would sober off and not touch liquor for several months. His drink was at first whiskey, but being told that gin was better he took it instead. For the last couple of years he returned to whiskey. His appetite was always bad, but when on sprees would not eat at all, and very little for a considerable time after. About two months ago he noticed that his feet were swollen at night, but that in the morning the swelling was gone. This continued for two or three weeks, when the swelling in the legs increased, and, although lessened by rest in bed, did not disappear in the morning as formerly. Then he noticed that his abdomen was swelling, and that his face on the side on which he slept was swollen when he got out of bed in the morning. About a month ago he came to the Out-door Clinic, and there presented the following condition as taken down by Mr. Punchard, my clinical clerk: Both legs swollen, up to about three inches above the knee; pressure by the finger causes deep pits; abdomen swollen and tense. Tapping the abdomen with the fingers causes a distinct wave to be communicated to the hand placed flatly on opposite side of abdominal parietes. Scrotum swollen to about the size of an ordinary child's head at birth. Penis all but lost in the swelling; face pale, flabby, and swollen, especially so in the loose areolar tissue under each eye; slight headache; exertion causes slight breathlessness; bowels regular but motions are costive; pulse soft and about 70 per minute. Hepatic dullness if anything slightly decreased. Passing about an average amount of urine, which is of a deep amber color. On examination the urine was found of a sp. gr. of 1030, acid in reaction, and to contain about 60 per cent. of albumen. I placed him on a mixture of liquor ammonia acetatis, tincture of the muriate of iron and tincture of digitalis. The first constituent was given in large doses, so as to act freely on the skin. I was rather afraid of this patient continuing as an out-patient, exposing himself, in his visits to the Hospital, to the cold wind of this season of the year, and advised his coming into Hospital. As he declined, however, I gave him directions to clothe his body very warmly when he visited the Hospital and to select mild days for his visits.

Those who saw him down stairs will to-day notice a marked improvement. The swelling in the legs is not half what it was, the swelling on the scrotum is entirely gone, and the puffiness of the face, as well as its pasty charcter, have all but disappeared and, in its place, there is a more healthy hue of the skin. The headache is also better, though

Misprint

it sometimes bothers him yet. He himself declares that he is very much improved, and remarks that he can now walk fairly rapidly without much breathlessness. I will get him to pass some urine and will test it in your presence. The specimen of urine now before you was just passed by the patient, and its sp. gr. is 1025. Its color is not so deep as the specimen he gave us some weeks ago. I have now boiled the urine, and added two or three drops of nitric acid. As you perceive, the amount of albumen has much diminished, there not being now more than 10 per cent. Altogether the case so far, is a most satisfactory one. I look upon it as a case of chronic Bright's disease. The causes of this disease are :

1. Succeeding acute attack. 2. Constant exposure to cold. Wet and sudden changes of temperature. 3. Abuse of alcohol, especially spirits. 4. Constitutional diathesis : (1, gouty ; 2, syphilitic ; 3. tubercular.) 5. Pregnancy—about 5th to 7th month of utero-gestation. It is met with more in males on account of their exposure.

Symptoms.—Frequent micturition, especially at night, dropsical accumulations, liable to disappear and return, skin deficient in action, dry, rough and harsh, is pale or sallow, shortness of breath. Uneasiness over region of kidney. A headache and dizziness, and serious uremic symptoms may occur at any moment. Derangement of digestion, accompanied with flatulence and constipation, with alternating diarrhœa. There is often gradual loss of sight, and opthalmological examination of eye shows an albuminuric retenitis and hæmorrhage.

In this disease we meet with several varieties of pathological changes in the kidney :

1. LARGE, WHITE, SMOOTH KIDNEY.

This is met with in cases following an acute attack, or it may come on gradually from taking cold. The organs are large and pale with smooth surfaces. In this variety urine generally deficient, pale, turbid, sometimes smoky—sp. gr. either normal or rather high ; contains albumen and various casts, the chief casts being epithelial and granular. Anasarca is a prominent symptom, and effusion into serous cavities. General surface, especially face, is dull, white, puffy, pasty, smooth and glossy.

2. GRANULAR, CONTRACTED OR CIRRHOTIC KIDNEY.

The onset of this form is very chronic and insidious. It is chiefly associated with gout and chronic alcoholism, and in persons well up in years. The kidney is contracted and atrophied, sometimes only weighs an ounce or two ; granulations on the surface. The urine generally abundant, at times very copious, color light, sp. gr. low, amount of albumen slight, sometimes none at all ; casts are few, and are generally what are termed hyaline or waxy and granular. Towards the close the urine is scanty, at times suppressed. Generally dropsy is absent ; if present is slight ; skin is harsh and dry, but not pale, puffy or pasty ; face sometimes pinched. There is also marked debility.

3. FATTY KIDNEY.

The kidney is the seat of fatty infiltration, while fatty changes are at the same time going on in other portions of the body—notably the liver. Under the microscope fatty casts are seen.

4. LARDACEOUS OR ALBUMINOID KIDNEY.

Kidneys generally enlarged, surface smooth, consistence tough and hard. There is evidence of previous deposit of albuminoid material in other organs ; the kidney only as a rule being secondarily affected. At first urine is very copious, pale, no sediment ; low sp. gr., 1005 to 1012. Albumen at first either absent or present in small quantity. Later the albumen becomes abundant and the urine diminishes, and its sp. gr. increases considerably. General dropsy is a prominent symptom. Most cases terminate fatally. Lasts from 6 months to a year and a half ; very often some intercurrrent disease cuts them off, such as pneumonia, pericarditis and œdema of the glottis.

Treatment.—The therapeutical indications relate to the dropsy and the prevention of uremia. If dropsy is slight saline cathartics, as sulphate of magnesia or sulphate of soda or citrate of magnesia ; if effusion of fluid is large what are called hydrogogue cathartics are necessary—as elaterium in $\frac{1}{16}$ to $\frac{1}{4}$ of a grain, every hour till it acts. It should then be at once stopped to prevent vomiting. Gamboge or compound jalap powder, either alone or combined with pot. bitart or 5 to 10 gr. of calomel. Diuretics are not very reliable. Of this class, give pot. bitart., in doses not large enough to purge or potas. acet. with the infusion of digitalis. Infusion of Parsley root said to be very good. An infusion of digitalis ℥j in ℥xx of aqua and applied on spongio-pilira over the kidneys is useful. Digitalis leaves in a linseed poultice also over kidneys.

A liniment of digitalis, iodine and squills, rubbed over the loins and legs often increases the urine enormously. It is apt, however, to produce

soreness of skin. Cannot be continued long. Sudorifics are useful. Hot-air bath; introduce hot-air under the bed-clothes, free perspiration, then cover with plenty of clothes. Care must be taken not to produce prostration. Dover's powders, liquor ammonia acetatis, pilocarpine the active principle of jaborandi.

Punctures, in case of excessive distention of skin and genitals, must be superficial, and not draw blood. The quantity of water which can thus be drawn away is surprising. If erysipelas is prevalent do not puncture; the punctures are apt to be attacked with erysipelas. Look out for uremic symptoms, and treat them actively. They are indicated by somnolence, coma and convulsions; use active purgation and hot-air baths, if they come on. Skim milk treatment is good in all forms; best in large white kidney. Hygienic measures, change to a warm climate and warm woollen clothing. Overtasking of mind or body, exposure to the vicissitudes of the weather, the use of alcoholic liquors, must be interdicted.

WEID OR EPHEMERAL FEVER.

Read before the Medico-Chirurgical Society, Feb. 5, 1884.

By R. A. KENNEDY, M.D.

MR. PRESIDENT AND GENTLEMEN,

In looking over a number of reports of cases of puerperal fever, I found several relating to that condition known as weid, or, as it is sometimes called, ephemeral fever. It has occurred to me to bring this subject before you, as it is not without considerable practical importance from the possibility of mistaking it for that grave obstetrical disease, puerperal fever.

In the different text-books on midwifery but little more than mention is made of the condition vulgarly called weid. Indeed, nearly all these works include it with milk fever, evidently regarding it as an exaggerated state of that disorder. Having, when in charge of the obstetrical department of the Western Hospital met with several severe forms of weid, I have been led to look upon it as something more than an exaggerated milk fever, and something entirely apart from the graver disease, puerperal fever. As a matter of common experience the first flow of milk is in many cases accompanied by some feverish disturbance, and this is usually termed milk fever. The symptoms and sequence of weid are, however, of such a decided character, that the ordinary denomination of milk fever does not appear to me a sufficient definition, but rather indicates a mere passing disturbance. On the other hand, the occurrence of a weid with its pronounced stages is apparently an indication that some specific occurrence has been induced.

Older authorities gave the subject some importance, but modern authors, I think, err in assuming its non-existence, some consigning it to oblivion as a "legend no longer to be believed in." No doubt our improved treatment of lying-in patients, and better knowledge of the physiological requirement of lactation, gives us fewer opportunities to observe such cases, for I am sure the older members will agree with me that it was much more common in the earlier days of their practice than it is now. The term Ephemeral Fever is misleading, unless remembered in this restricted sense, because we find the word used in other than obstetric authors to indicate a frebicula, or slight fever occurring in children and young persons. The word weid is so widely used by experienced women to designate this specific fever that I am surprised not to find any definition of it in Thomas' New Medical Dictionary; and Dunglison defines it only as "Mastitis or inflammation of the breast, or what is vulgarly called a weid."

I would define a weid as a specific ephemeral fever occurring in women of nervous temperament during the earlier periods of lactation, commencing by severe chill, and ending in profuse diaphoresis, such attacks seldom exceeding twenty-four or thirty-six hours.

That character and temperament favor its development is shown by its occurrence chiefly in patients of the nervous class—such patients, when weakened by loss of blood, want of nourishment, or exhausting labors, to which may be added mental depression, being mostly liable to it. And just such cases are met with entering Hospital or amongst the poor. For the same reasons I have met with it most often from the third to the fifth day coincident with the fluxion occurring in the mammary glands, but under other circumstances I have seen it at much later periods, when the functions of the breasts were fully established. An attack is generally attributed to some exciting cause, such as cold, mental emotion, or some derangement of the stomach or bowels, though usually the patient exhibits some inquietude or slight feverishness for a few days previous, yawning, and stretching, with pains in the limbs and soreness of the breasts. The attack commences with a marked chill, beginning in

the back, between the shoulders, and from there rapidly extending over the body, accompanied with great pain in the head and large joints. This cold stage usually lasts from an hour to an hour and a half and is succeeded by a hot, dry fever. The face is flushed, throbbing temples, rapid pulse, and very high temperature; mental confusion also is present and sometimes active delirium. This soon passes into the third stage in which there occurs a most profuse diaphoresis lasting many hours until, finally, the fever and pains are relieved. Throughout, the tongue is more or less coated and constipation exists. The breasts are sore, but not distended, as the milk is generally suppressed. If the lochial discharge is continuing this is lessened in quantity, and there may be some tenderness over the uterus.

The temperature rarely rises above 103° and the pulse above 100, but in severe cases it may exceed these figures. Very few of these cases occur without some other local complication, but as such are not constant they cannot be looked upon as factors in this complaint. Recurrences are apt to take place, and such often assume a resemblance to intermitting fever.

From the severity of the symptoms a case of the kind might be mistaken for puerperal fever until the marked character of its stages, and period of duration had cleared up the diagnosis. A doubt might also arise on the occurrence of the chill, but enquiry as to the part in which this is first felt will soon enable an opinion to be formed. In my experience this chill differs entirely from anything observed in the cases of puerperal fever which I have treated.

The chill invariably commences in the back, between the shoulders—patients will often indicate the exact spot—and from there it rapidly extends over the entire body. In puerperal fever the chills often are insidious in their approach, slower in extension, not violent, and are first noticed in the extremities. I would draw your attention particularly to this difference not only from a diagnostic point of view, but also as a very strong indication of there, being a radical difference in these two conditions.

It is stated to be due to a septicemic absorption from the uterus, having no connection with the breasts, except that of coincidence, and therefore regarded as a mild form of septicemia or puerperal fever. Such is the view of Playfair and others.

The difference in the character of the chill and its occasional occurrence long after a uterine sepsis would be expected, seems to me to disprove this theory, so that I cannot look upon it as a septicemia proper. Leishman, Schroder and other writers agree to its being due solely to over-distension of the breasts. If this is the chief and only offence we would find it an exceedingly common affection in our daily practice, and it would occur more often in Hospital cases, for the majority of such patients never put the child to the breast. Indeed I do not remember to have seen a case other than in nursing women, and in the case to be cited the mother nursed her child up to the time of attack, when it was removed for prudential reasons. Having met with cases at varying periods of lactation, and in some after the functions of the breasts have been well established, the inquiry has naturally suggested itself to me as to the cause of the profound disturbance. I am at a loss for a solution, but have no doubt that it springs from, or is intimately connected with, some abnormal occurrence in the mammary glands. Whether over-distension of the breasts, or, what I have most generally observed, suppression of the secretion of milk develops some change or new product in the fluid, or whether it is due to a reflex action, and therefore, in its nature, a nervous fever only, are matters for discussion. I am inclined to think that both occur, but the latter chiefly. Any exciting cause acting on a patient so predisposed, thereby inducing a sudden disturbance in the activity of glands susceptible of such great sympathetic relations, must affect the whole nervous system very profoundly. The chill seems to point to some such explanation, and is analogous to the rigor occurring after an amputation, or the passage of a catheter, or even urine through the urethra, though here the continuance of the irritation prolongs the chill. The after-stages, especially the profuse diaphoresis, indicate also the deep impression made upon the vaso-motor centres, whilst the shortness in duration of the fever is hardly compatible with septicemia. The following case is condensed from a very full report taken by a student in the Western Hospital:

A. A., æt. 20. S. Admitted Oct. 30th, labor having set in the day previous. On the 31st, at 11 a. m., after a tedious labor, a male child was born. No special difficulties attended her labor. For six weeks before entering hospital she had lived in a cold, damp house and with insufficient food. Prior to this period she had resided in the country, and was always healthy and strong. All through her preg-

nancy she had been particularly well. For the first five days after the child was born no special symptoms occurred beyond a dull pain at the top of the head, with a tendency to restlessness, and the breasts were tender. The child was nursed at the breast up to the time of the attack, when it was removed altogether. Until the attack the temperature had not risen above 100, or the pulse 90.

On Nov. 4th, at 5. a. m., five days after delivery, she was taken with a violent chill. And I now quote the exact words of the report: "This seemed to begin from a spot about as large as a hand, between her shoulders and gradually spread over her body to the extremities. Accompanying the chill a sudden severe pain at the top of the head, just back of the coronal suture, was felt. The headache and chill continued without intermission for the space of about an hour and a half. Warm applications and hot drinks were of no avail against it. About 6.30 the shivering ceased, being immediately followed by a violent fever, great thirst, delirium. Temperature 106; pulse 120, rapid and shallow breathing. Headache still complained of. This state continued for a short time when a profuse perspiration set in, great drops of sweat covering her body; headache and delirium ceased at 9 a. m. She was placed upon tinct aconite. and liq. ammon acet., gradually improving through the day. At two p. m. she felt a slight return of the chill on the right side. Sweating profuse all day, and an uneasy, cold feeling still remaining between the shoulders. At eight p. m. temperature 104; pulse 108. Diet beef tea and broth; the milk was suppressed, breast tender but not distended. Lochia considerably diminished in quantity but not offensive; no marked tenderness of the abdomen.

Nov. 5th (2nd day of fever) 8 a. m., Temperature 103. pulse 100; slept well latter part of night. Says she feels first-rate. Had slight pain on urination, face still flushed, skin hot and moist, no headache or pain elsewhere, great thirst, tongue coated and constipation, respiration slightly hurried and sighing, breast soft and flaccid milk, having been drawn off by breast pump.

No pain in abdomen except on deep pressure, feels soft and involution of uterus progressing normally. Lochia much diminished but not offensive. An enema was given this morning and brought away considerable fecal matters. Treatment continued. To get hot vaginal douches and allowed acidulated drinks. 8 p. m. continues to improve, temperature 101; pulse 90. Five grains of quinine was given as ordered.

November 6, 8 a. m., Slept well all night, mind clear, no pain; temperature 100, pulse 95, and feels well. Skin hot and moist, tongue clearing, thirst not so marked, breast soft, and not painful. No abdominal pain whatever. Lochial discharge increased. 8 p. m. temperature 100; pulse 96.

From this time onward the patient continued to improve; she was placed upon tonics and nourishing diet, the breast gave no further trouble, the usual ward treatment of ung. plumbi, Iod. and pressure being carried out. By the 15th she was allowed up daily, being then convalescent.

Progress of Science.

NOTES ON THE USE OF ANTIMONIALS

(J. B. Nias, M.B., M.R.C.P., in the *London Practitioner*.)

Antimony is not at the present date a favorite drug. I have very rarely seen it used, and perhaps should never have been led to use it myself, if I had not read the "First Principles of Medicine" of the late Dr. A. Billing, a text-book old-fashioned now in its terms, and in its references to physiology, but still a most excellent clinical guide.

Dr. Billing's favorite prescription was a combination of tartar emetic with sulphate of magnesia. It is still official in the St. Bartholomew's Hospital Pharmacopœia under the name of haustus antimoni cum magnesiæ sulphate: little used of late years, it was near to being left out, as I learn from Mr. Jeffs, at the last revision. This was the first preparation that I used. From old out-patient letters I find that the first cases in which I employed it were those of patients suffering from acute pleurisy. There come to St. Bartholomew's, as to all London hospitals, numbers of such from among waterside laborers, stokers at gas works, and others who, in their work, are exposed to vicissitudes of temperature; complaining, as is usual, of cough, more or less fever and pain in the side, the latter being pretty severe, and the chief cause of their seeking relief. These men (they are mostly males) are unwilling to lie up. They are not, as a rule, fit cases for admission as in-patients, and of any remedy that hinders them from work they are singularly impatient. In short, one has to try to cure them while letting them go about their work. Viewed by the light of what is expected in private practice, this may appear futile. If one sets to work rightly, it is not so. At the same time one must be prepared to have failure punished by the presence at the next visit of a pint or more of fluid in the pleural cavity; so that inconsiderate treatment, or, what has happened to me, failure in diagnosis, entails considerable trouble. I quote a case combining both faults:

On September 20 last there came to me, at the Western General Dispensary, W.R., aged 59, a strong, healthy, temperate man, employed at a coal wharf on the Paddington canal, complaining of a slight cough without expectoration, great tenderness over the right mamma, pain on moving the arm and a stitch on drawing a deep breath. He thought that he had strained himself when pushing a barge along the canal with a pole, which rested against his right shoulder. No pleural friction sound was detected, or any morbid sound in the lung. He thought he might have been chilled while sweating, but did not remember anything of the kind. Though there were no marks of injury, I accepted his version, and as he was unwilling to lie up, confined myself to ordering belladonna liniment to the side, and a draught three times a day containing 120 grs. sulphate of magnesia, 50 ms. of liquor morphia acetatis, and one drachm of liquor ammoniæ acetatis—not, perhaps, very erroneous treatment, still, if I had recognized the case as one of pleurisy, I should have prescribed otherwise.

On September 27 I saw him again. He had been at work all week, but the pain had compelled him to knock off on one day. His appetite was bad, otherwise he confessed himself easier. I examined his side, and noted a friction sound in the right axillary line at the fifth intercostal space, nothing more. Puzzled, but persisting in my previous diagnosis, I repeated the liniment, changing the medicine for a draught containing one grain of quinine and three grains of iodide of potassium, three times a day.

When next I saw him he had an effusion into the right pleura up to the level of the nipple. I will not detail the progress of the case, except to say he recovered after three weeks' attendance upon him at his home. This case has been a lesson to me. I hold that if a case of simple pleurisy goes on to effusion under the care of a practitioner, he should blame himself largely, if not entirely, for it. The effusion of serum is the second means whereby Nature keeps the inflamed pleural surfaces at rest, if agglutination by lymph has failed; and any one who considers himself a competent practitioner will hold, I think, that he should not let it fail.

In contrast to this case I quote another in which, in spite of misleading appearances, the malady was recognized, and the treatment, in consequence, directed with success :—

On March 10 last, there came to the assistant physician's department at St. Bartholomew's Hospital, where I was acting at the time, R. C., aged 37, a laborer of intemperate habits, depressed in appearance, and with the general look of a broken constitution. Twelve months before he had been in the hospital with pleurisy accompanied by effusion on the right side. His complaint was of pain in the left side under the edge of the ribs; of cough, shortness of breath, and loss of voice; very bad appetite, retching and vomiting on arising in the morning. Tongue flabby, clean at the edges, furred on the dorsum. Bowels very loose. Urine clear, dark, giving much red coloration with nitric acid. Pulse 120, soft, regular. Temperature normal. On the whole, he presented the picture of alcoholic dyspepsia. Physical examination showed traces of old pleurisy at the base of right lung in impaired percussion note, vocal resonance and thrill. At the base of the left lung I noticed doubtful crepitations and friction sound. This ailment had come on gradually for five days; he could not assign any cause for it. He had continued at work until the day before. Diagnosis was made of diaphragmatic pleurisy. He was ordered a large mustard poultice to the left side, and a draught containing one-eighth of a grain of acetate of morphia one eighth grain of tartar emetic, and sixty grs. sulphate of magnesia three times a day. Three days after he returned much better, the pain, friction sound and crepitus gone, complaining only of a little cough and distaste for food. He was given the haustus cinchonæ acidus, and a morphia linctus and continued to improve rapidly until he ceased attendance.

Inconclusive by themselves, these two cases are selected from a series out of which I have been able to draw some conclusions. Had I to treat these cases over again, I should employ the treatment which I employed with the second, feeling certain that I should have met with equal success.

Of local applications I have come to rely on two only: a mustard plaster not less than four inches square, kept on as long as the patient can bear it, and a mild vesication to the same extent with acetum cantharidis, or linimentum saponis compositum, painted on if necessary more than once. Stronger vesication makes a sore long in healing, and is more than is necessary for the cure.

Before, and for some time after I used tartar emetic, I was in the habit of prescribing the hospital mixtures containing acetate of ammonia with camphor water, sulphate of magnesia or vinegar of squill respectively, adding morphia when required, in a manner which may be condemned as routine, but which is in a large hospital found to be unavoidable. The effect of these I found uncertain, the patients as often returning worse as better. I can hardly convey an idea of the confidence with which I permit myself to treat these cases since my adoption of Dr. Billings's mixture. The quantity of antimony employed should not produce any purgative, emetic, or sudorific effects; if it does it should be diminished, or entirely stopped. Its action is to be appreciated by comparison with the use of other drugs. The alleviation of the pain is not due solely to the morphia, nor to the counter-irritant employed. For it appears in cases where neither has been used; and I myself put it down to a restoration of circulation in the inflamed parts, similar to what I have seen produced in more than one case of erysipelas attendant on varicose veins in the leg, where the same remedy was employed.

Antimony appears to be a tonic to several nerve centres in the medulla (a point to which I shall

again refer), among them to the vaso motor; an action which is reversed by poisonous doses. That it has also a local action on the blood-vessels I think highly probable, but am unable to define in terms of physiology what that action is. My belief in the existence of such a property, however, led me to try the drug in a case of pleurisy with effusion, in the hope of favoring absorption; after the manner in which mercury used to be prescribed. The result was successful: how far it was due to the treatment cannot with certainty be pronounced. :—

H. C., aged fourteen, walked to Mortlake from Paddington to see the Oxford and Cambridge boat-race; and, arrived there, while heated sat down upon the grass. On the way home he felt chilly and giddy and sick; the same evening he had rigors, and a cough appeared. On April 2nd he was brought to me at the Western General Dispensary, and was found to have an effusion in the right pleural cavity to the level of the nipple. His heart was displaced one inch to the left. The temperature was 102°·4. The pulse beat 130 to the minute. I ordered mustard poultices to the right side, and a draught containing 15 ms. of antimonial wine, that is 1-16 gr. of tartar emetic, and 60 grs. of sulphate of magnesia in an ounce of spearmint water three times a day. He was also to take a teaspoonful of the dispensary linctus when the cough was troublesome; to have low diet, and to stay in bed. On April 4th I visited him at his home. I found him much easier, the cough much less, the temperature 101°; the bowels were inclined to be loose. Absence of appetite was the chief thing complained of. This I have noticed in nearly every case in which I have given antimony for a day or so. It is not by the patient's description, nausea, nor the anorexy of fever, but a "feeling of not being ready for the meal when it arrives." Being a spoilt child, he had not allowed his mother to keep on the poultices, and they produced little effect, not reddening the skin. The mixture was continued in half the dose. On the 8th he professed himself quite well. His heart had receded to its normal situation. The area of dulness to percussion had diminished by one inch. Vocal vibration was restored nearly equal to that of the healthy side. Moist râles were heard over base of right lung. He had refused to stay in bed, and had made himself sick on raw apples; the consequent stomach-ache was his sole complaint. I will not detail the subsequent progress of the case; his recovery was complete and rapid. Ten days afterward there remained of the effusion no sign but a flatness of the percussion note, and rhonchi with an occasional friction sound over the affected area. He continued on the same medicine throughout.

Now, though an advocate for the removal by aspiration of the pleural effusions, whenever practicable, I find that it is often not possible to persuade those who are treated at their own homes to submit to the operation: and in such cases any drug which is reputed to promote absorption should receive a trial. The impression left on my mind by this case is that the antimony did act, as mercury is reputed to act, as an absorbent, and at my next opportunity I will repeat the trial.

Whilst following the practice of the Paris hospitals, I several times witnessed good results from a practice of M. Jaccoud's at the Hopital de la Pitié. In cases of serous inflammation complicating rheumatic fever, where he apprehends effusion, he prescribes 30 centigrammes of tartar emetic in 100 grammes of julep, a tablespoonful every hour until the whole has been taken. This produces vomiting and diarrhæa, which cease towards evening. Then the patient receives three grammes (I may misstate the quantity) of extract of cinchona in a cordial. In one case, the subject of a clinical lecture, as a result of this treatment, an effusion had disappeared by the next day. On the day after it reappeared, and the evening temperature rose to 39.4 C. The treatment was repeated with a dose of only 20 centigrammes of tartar emetic, with relief. It was finally necessary in this case to repeat the treatment four successive times, always with a day's interval between each. This is M. Jaccoud's rule: not to trust the benefit obtained on the first day, unless the following morning and evening temperatures be normal. If not, the prescription is repeated on the third day with a diminished dose of tartar emetic; and when the symptoms are subdued, the previous treatment of the joint affection is resumed.

Of thirteen cases of acute rheumatism, complicated with effusions into the cavities of the chest or meninges, and treated with salycilate of soda, in the course of the year 1877, three died. In 1882, of 23 cases similarly complicated, treated, as is above described, he lost one. A decidedly good result. It is generally supposed in England that the treatment of medical cases at least, in France is nihilistic and inefficient; but in dangerous crises it is as energetic or more so than ours, and on the whole justified by the result. I left Paris with more faith in antiphlogistic remedies than I possessed when I went there. It is the general custom in England to leave effusion in the serous cavities, complicating rheumatic fever, alone; some few blisters or abstraction of blood. Aspiration is generally avoided, I believe. Therefore I think this practice of M. Jaccoud should be recorded in the list of remedies.

Though vomiting and purging take the principal part in this treatment, an impression doubtless is also made on the system by the antimony absorbed, by which the course of the disease is permanently modified, a modification which would not be effected by any simply vomito-purgative drug. I cannot render my meaning more plain than by relating the following case:

On February 16th last I was asked by the gentleman who was at that time acting as house surgeon to the Western General Dispensary, to see J.

W., a carman aged 33, an old patient, but who for his present illness had been under treatment four days only, and was progressing badly. Going to the house at once, I found him in bed, propped up with pillows, gasping for breath, his lips swollen and purple, his tongue the same, so large that he could hardly protrude it, and covered with flakes of yellow fur; his face ghastly, dusky and puffy; his eyes glistening and congested. The pulse beat 100 in a minute, large, heaving, regular. The respirations were 40 in the minute. All over the chest were loud, moist rhonchi. The percussion note was good throughout. The pulse of tricuspid regurgitation showed in the jugular veins. I have never, even afterwards, completely satisfied myself as to the lesions in his heart: mitral and tricuspid regurgitation there certainly were; whether there was aortic too I could not decide. All that I made out at the time was that the apex beat was one inch outside the nipple line, and a strong pulsation in the epigastrium. The action of the heart was forcible, tumultuous; both sounds prolonged and indistinct, without diastolic pause. His legs and his hands were œdematous and cold. For some nights he had not slept for fear of suffocation. He complained greatly of wishing to be sick, wanting solid food (which had been forbidden), as it eased the sensations in his stomach and refusing slops. Poultices (which had been ordered) suffocated him, he said; and if the case had not been so serious, it would have been laughable to see, what I once saw on my entrance, the nurse holding a large jacket poultice and his wife a basin of broth, beseeching him to be reasonable and to take what was ordered. That the man was likely to die in a few hours of cardiac dyspnœa, unless promptly relieved, was very plain. He had been taking from the first a mixture containing 5 grains ammonium carbonate, 8 ms. tincture digitalis, sulphuric ether 1½ drachms, infusion of senegas one ounce, every three hours. Sixty grains of compound jalap powder had been ordered on the 12th without producing any effect, also brandy four ounces a day. This stimulating treatment had, apparently, increased the congestion. I thought venesection indicated, but difficulties were in the way. I therefore decided on an emetic, having read of its efficacy in similar cases. From fear of overdoing it, I prescribed what proved barely sufficient. For I ordered antimonial wine f3ss, ipecacuanha wine f3ii, in sufficient water, to be taken at once, and when it should have acted a draught of spirit of ether and aromatic spirit of ammonia, of each f3ss. in water in case he should faint; and, for food, toast, and a brandy-and-egg mixture. And then I took my leave, telling the friends that I had very little hopes of his recovery. Next morning I called, fearing to find him dead. What was my comfort to find him propped up on his pillows, soundly sleeping, sweating copiously, and learned that the emetic had been taken about noon but had not produced vomiting, only two fluid motions. In accordance with my instructions, they had waited for the vomiting before giving him any food or medicine, so that he had been until the evening without taking any. Then he had taken of both and fell asleep, and slept for several hours. I woke him up by listening to his chest. He professed himself much better, the feeling of nausea was gone, and he asked for a chop for dinner. The tongue in particular had shrunk to half the size it was on the previous day. The chest signs were unchanged, and the dropsy not diminished. He was ordered a hot bottle to the feet, the foot of the bed to be raised, to continue the ether draught, and to have the chop for dinner. On the next day but one, the 19th, I found he must needs get up to sit near the open window for fresh air (fortunately the weather was mild and fine), professing himself comfortable. He ultimately recovered, and went back to his work.

Now here was a case in which a very small quantity of tartar emetic, one-eighth of a grain, aided by the equivalent of six grains of ipecacuanha, which may be taken as another eighth of a grain of tartar emetic, sufficed to produce a radical alteration in a malady. The symptoms pointed to his stomach being congested, full of mucus and saliva, and distended with flatus, by which digestion was prevented and respiration was impeded, and the rest of the alimentary canal no doubt was in a similar condition. Partial though the action of the remedy was, it cleared the bowels. No doubt it depleted the blood of a certain quantity of serum, and so prevented further exudation into the bronchi. But it did more: it gave the patient several hours' sleep, and a feeling of comfort and safety which he had not had. This means that his system had not been enabled to accommodate itself to his impaired circulation and hæmatosis until time had been gained to improve them. And the satisfactory conduct of his digestion on the following day shows that the mucous membrane of his alimentary canal had nearly resumed its natural state. Stimulating drugs and a considerable quantity of alcohol and liquids were simply embarrassing this man's malady; and I have no doubt now, looking back at the case, that venesection also would have fulfilled some of the indications of the case; though not, I think, everything that was performed by the tartar emetic practically unaided.

Ipecacuanha resembles antimony in nearly every respect. We are recommended it in preference to the latter, when we require a milder action. This milder action, I believe, is due to a deficiency of emetin in the specimen used, and when the powder is administered in bulk, to the necessity of its extraction by the gastric juice. The experiments of Dr. Duckworth with emetin, related in Vol. V. of the St. Bartholomew Hospital Reports, show that its toxic action is powerful and very similar to that of antimony. As long as the high price of emetin excludes it from general use, it is very desirable that the galenical preparations should be standardised before sale. The use of ipecacuanha in powder as an emetic is wasteful,

and when the stomach, as in the case of J. W., is not in a condition to secrete, its action is tardy or wanting. From these defects tartar emetic is free, and a judicious alteration in the amounts of the doses prescribed by the Pharmacopœia would reveal merits now denied to it. Its purgative effect is an additional advantage, and one that is often overlooked in its use.

Before passing from tartar emetic I would draw attention to the benefit which medical men may derive from a study of veterinary practice. Veterinary practice is simply a vast field of pathological experiments untrammelled by Vivisection Acts, and the use of antimony as a tonic, familiar to every groom, is worthy our best attention Its effects, thus used, are exactly those of arsenic as currently related, upon the Styrian arsenic eaters; improvement of the wind, of the circulation, of the functions of the skin, increase in weight, and plumpness of the muscles, the latter being probably the result of diminished tissue change.

Many preparations, all formed by oxidation of the sulphide of antimony, such as the kermes, the glass of antimony, and the golden sulphide have been official, as also various antimoniates and antimonites. All these may be found described in Hooper's Medical Dictionary and similar works. Uncertain by their composition, and by their modes of preparation, they have fallen into disuse. They depend for solution on the acid of the stomach for absorption; whence, as is well-known, violent irritant effects often followed their introduction when accompanied by acid medicines or solid food. The oxide of antimony, which seems to be the active part of all, has superseded them. To this James' powder owes its efficacy, but is reputed, and as far as my experience goes, justly, far superior to the pulvis antimonialis of the Pharmacopœia, which is a simple mixture of the oxide with phosphate of lime. This is, I think, due to the physical condition of the ingredients of the proprietary powder, being more apt to excite the flow of solvent fluid, taken as the powder usually is, on an empty stomach, at bedtime.

For the production of diaphoresis this slow absorption of a considerable quantity of antimony is better than a single minute dose of tartar emetic more quickly absorbed. The same object is attained by administering Dover's powder in a solid form, instead of presenting the active ingredients to the stomach in solution. Trousseau and Pidoux point out that the sedative effects of antimony are greatly aided by low diet, and that with full diet its irritative qualities appear. Depletion aids similarly, so that the most favorable results in sedation are to be observed in those on whom depletion can be most safely practiced, namely, male adults. Trousseau believed strongly in alteration of the constitution of diseases, and I will refer to the article quoted for some interesting notes of the consequent alterations which he found necessary in the prescription of antimonials.

I owe to witnessing the practice of my colleague, Dr. Stocker, at the Western General Dispensary, my first use of the pulvis antimonialis and the James' powder, both of which have been to me the means, alone or combined with other drugs, of conferring many a good night's rest.

Antimony is not an anodyne, and is, therefore, useless against pain. Nor do I anticipate much benefit from it in delirium, from the slightness of its action on the cerebrum; though I am not unmindful of Graves' combination of it with opium for his fever cases. But it possesses a tonic action on the medulla similar to that of zinc, of phosphorus, of atropine, and of picrotoxine; by which it is indicated in cases where wakefulness is due to exhaustion, alone or as an adjunct to alcohol and opium. The sudorific action for which this preparation is noted depends, I think, on the stimulation, mainly of the sweat centres in the medulla, but also, without doubt, of the sweat glands and their distributed nerves. In harmony with this idea is the fact, which I have often noticed, that antimonial powder checks the night sweats of phthisis; which is also a property of Dover's powder and of alcohol. By Dr. Bunton these sweats have been shown to be most probably due to exhaustion of the respiratory centre by coughing, aided by a reduction in the area of functional tissue in the lungs; by which carbonic acid is permitted to accumulate in the blood, and to produce that sweating which is one of its poisonous symptoms. Thus it is that very diverse drugs, all of which possess the power of raising the tone of the nerve centers, may have a common use. I cannot do better than quote an illustrative case :

There came to me at the Western General Dispensary on August 30th last, Eliza H———, unmarried, aged 29, a shirt maker, born in London, All her brothers and sisters died in infancy. She has long been subject to cough, and now complains that it is worse, with much yellow phlegm. She has lost her voice, and has night sweats. Examination showed her chest to be barrel-shaped, with a very limited range of expansion; "breathes with her diaphragm," says my note. The respiratory sounds were very feeble at the apex of the right lung, and the expiratory sound was morbidly prolonged; moist crepitus extended from the apex to the nipple. The heart's action was rapid and feeble. She was ordered a draught containing ¼ gr. of sulphate of iron, 10 grs. of sulphate of magnesia, 5 ms. of dilute sulphuric acid, three times a day; at bedtime, a powder of three grains of liquorice with one of pulvis antimonialis. Seen September 6th for me by Dr. Stoker, who noted "much better" and repeated powder mixture. On the 10th I saw her myself, and noted "much better; no night sweats now; very little cough; complains of bad appetite;" that is, the curious absence of the proper sensation at meal time, which I have above noticed. I therefore discontinued the antimonial powder, and repeated the draught with two grains of sulphate of iron, and two grains of sulphate of quinine. She did not come again.

A drug which is a most suitable adjuvant to antimony, where cough is present, is conium. It has been under a cloud since Dr. Harley's examination of its properties, and passes for one of the most inert articles in the Pharmacopœia. Doubtless, its effects are variable, since they are due to a very volatile alkaloid; this, however, is a reason not for abandoning the use of the drug, but for rendering its composition more uniform. The action of conium on sensation resembles that of curare and of camphor; it paralyses nerve endings, both motor and sensory. Now it is plain that a drug which heightens the action of the respiratory centre will probably renew the cough, which had exhausted that centre; to it we may therefore very conveniently add one which will numb to the required degree the nerves that are distributed to the point of irritation. Opium and alcohol both have this anæsthetic property; atropine and hyoscyamine to a much less extent. All, no doubt, have seen cases of phthisis in which atropia has arrested the sweats, without conferring relief from cough; or has even increased it. I take this to be the physiological explanation of the favorite combination of camphor with hyoscyamus. As a tranquilising remedy in various affections, I have certainly witnessed excellent results from the addition of 4 or 5 grs. of extract of conium to antimonial or James' powder.

In this paper I have not sought to advance new theories so much as to draw attention to the neglect of a remedy which has held a place in therapeutics for a very long time, and which has enjoyed the favor of the greatest physicians. What was santioned by Sydenham, by Huxham, and by Trousseau, must be possessed of qualities which should challenge our attention. Like my knowledge the notes are not exhaustive; I hope hereafter to extend both.

MODERN METHODS OF TREATMENT OF PULMONARY PHTHISIS.*

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A Clinical Lecture delivered at the Bellevue Hospital Medical College, October 27, 1885.

Gentlemen:—The subject of my lecture before you to-day is to me a most interesting one. It is especially attractive because I believe, by the general adoption among practitioners of the means to be referred to, a positive and great benefit may be afforded to a vast number of individuals who are now sufferers from an otherwise almost hopeless disease. Let me say to you, at the beginning of my remarks, so as to avoid any possible misapprehension, that I am of the opinion at the present time, just as much as ever before, that all the usual means of treatment in pulmonary phthisis which have been proved to be practically useful are none the less advantageous because something newer and further can be added. By all means advise your phthisical patients to observe strictly well-determined hygienic rules—to breathe, habitually if possible, a high, dry, pure, equable atmosphere; give them cod-liver oil, as much as they can properly digest and assimilate; let all undue mental and physical fatigue be eliminated, if it may be, from their daily existence; locate them in a large, sunny, well-ventilated apartments; see to it that their food and drink are nutritious and suitable—in short, do whatever you can to retard the march of disease in the lungs or to promote and obtain absolute cure. Admitted, then, that this plain duty is set before us; admitted that what our classical text-books teach is sound doctrine, and should be unerringly followed, still, may we not go beyond their teachings and try new methods which reason encourages and clinical observation and experience obviously support?

The answer is evident. The three methods, then to which I call your attention, taken in therankof what I believe to be their relative impor tance are—

1. Increased alimentation.
2. Continuous antiseptic inhalations.
3. Intra-pulmonary injections.

One of the symptoms most to be dreaded in the course of pulmonary phthsis is anorexia. When this condition is insurmountable, the patient's condition is well-nigh hopeless: Food must be taken so as to preserve life. But at times the repugnance to food is so great among phthisical patients that they turn from it in sheer disgust. No matter how temptingly the dish is prepared, there still remains the inability to swallow it. Now, then, how can the appetite be awakened, especially when its complete absence is already feared at an early stage of pulmonary phthisis? Of course, we may, and should, first try the different vegetable bitters combined or not, with an acid or an alkali; but if these fail—and very often they will, despite our best directed endeavor—what then shall we do?

Under these circumstances, and in view of what my reading and personal experience show me I now recommend *washing out the stomach* by means of a soft-rubber tube connected with a funnel. After a very short period—sometimes within a few days from the time daily washing is begun—the patient will gladly say that his appetite is already much improved. Take another instance—that for example, of a patient whose appetite is not good, it is true, but who, nevertheless, forces himself to eat, and who within a few minutes or hours after food is taken voluntarily, vomits it up. How are such patients to be treated? As I have said in regard to my first exampled—by washing out the stomach daily until stomachal tolerance is, at least, acquired for easily-assimilable food. Further, there is a class of cases in which the anorexia is only moderate and the power of digestion for food not completely lost. Of course, it is an effort to eat, and there is certainly no desire for food. Besides, soon after food is swallowed the

*From the *New York Medical Journal*, Nov. 14, 1885.

patient suffers from weight or pain in the stomach, acid eructations or extreme flatulence, which are about equally unpleasant, and render the patient unwilling to eat food unless forced to do so by his own convictions or the urgent appeals of friends. Manifestly, in these instances the patients do not take sufficient food, or do not assimilate it well enough to hold their own, far less to repair the daily damages that are affected by the wasting disease of which they are victims. Here, again, I counsel daily washing of the stomach. In the beginning I do not advise so-called forced feeding by means of the soft rubber tube. I believe it is wiser, in many instances, to wait some days before commencing alimentation in this manner; still, there are exceptions. In certain cases, even after repeated washing of the stomach, the patient will be unable to retain food after swallowing it. He may feel that he needs food, and he may be perfectly willing to take it, and yet every time he attempts to swallow even a few mouthfuls, the food is almost instantly rejected by an effort of retching or vomiting.

Singular to say, the mere act of swallowing appears sometimes to occasion the subsequent feeling of nausea and vomiting. If we introduce food into the stomach with the stomach tube, even in tolerably large quantities, the food is retained. and not only is it retained, but it is digested and assimilated, and the patient soon feels better and stronger. And with the repeated administration of food in this manner the appetite returns by degrees and in a relatively short time, and the stomachal digestion continues daily to improve. After the lapse of several weeks, a month or two, or perhaps longer, daily washings of the stomach are no longer, necessary. These may be repeated at longer intervals, finally to be stopped altogether. In regard to the forced feeding, it is somewhat different. The rule is to super-aliment, if possible—to give the patient more than he can possibly crave or desire, to make him digest and assimilate more food than he would be willing to, or, indeed, could swallow. Now, this may be accomplished by pouring into the stomach once, twice or even three times a day milk, milk and eggs, milk, eggs and beef peptonoids, in smaller or larger quantity The main indication is, after all, to *stuff* the patient to his or her utmost capacity, short of causing actual distress or incompetence on the part of the digestive organs.

It is again, a remarkable fact, that, within an hour or two after the time when a pint or two of milk, two or three eggs, half to an ounce of beef peptonoids have been poured into the stomach of a phthisical patient, he or she will have quite as good appetite as, if not better than, there would have been if no nutriment had been taken. When this forced alimentation, together with the regular daily meals, has been continued for some days, the patient's weight will commence slowly to increase; and, so far as his general condition is concerned, it will be manifestly improved. While this is true—and although flesh and muscular vigor are both obviously on the increase—the intra-pulmonary condition will remain absolutely stationary. It may also progress slowly or rapidly. It may, fortunately, become retrogressive and markedly improved. An instance of the former kind was fully reported by me last June, at a meeting of the American Laryngological Association, and I do not wish at the present time to repeat this history. I have not been able to bring before you to-day a case of pulmonary phthisis in which washing the stomach and forced alimentation are being carried out, although I have two such cases (in women) under my care at St. Luke's Hospital.

In place of *cases of phthisis* being thus treated and in order to show you the ease and effectiveness of the plan of *forced alimentation*, allow me to present to you this man. The patient, J. P., is forty years old, single and a cigar-maker. He has suffered for a long while from asthma that followed a bronchial attack, which occurred during the war of the Rebellion. He has had dyspepsia during three years, which has frequently been accompanied by vomiting of very offensive liquids. Occasionally he has felt much depressed, and even ill, from the repetition and severity of these paroxysms. All the food he ate lay like a dead weight on his stomach or gave him intense pain. His power of digestion seemed completely gone, and he suffered continued misery unless he recurred almost daily to the use of purgative pills. In this case the stomach-pump was first used on October 22, 1885, and the stomach washed out thoroughly with warm water slightly alkalinized by means of borax. After the first washing, twenty-two ounces of milk were poured into the stomach and easily retained. The operation of washing and feeding with the tube has been repeated twice since, until to-day (October 27th), and to the milk two or three eggs have been added. Already affirms, as you hear, that he has now no pain in his stomach after eating, that food does not lie as a load in his epigastrium, and his appetite has improved. Yesterday he ate and digested some meat without difficulty, which is the first experience of this kind he has had within several months.

Now, then, what this man states I have heard repeatedly before, and had several light cases under my care at different times. For your benefit I will now show you how easily my patient swallows his tube, how easily his stomach is washed out and how acceptable milk received into his stomach through the tube appears to be. A word or two, before I leave this subject, in regard, 1, to the apparatus employed; 2, to the best manner of using it. Simple instruments are often the best, and so it is in this instance. The instrument I show you is, in my opinion, the best one for combined washing and feeding with which I am acquainted. There are several—others invented or modified by different physicians—each one having its special advantage, perhaps, but each somewhat complicated; at all events, none

quite so simple as the one here shown, which, to all intents, is little more than a long rubber flexible tube, with a vulcanite funnel at one end. To be more particular, I would add that the stomach-tube is similar, except for increased calibre and length, to those made by Tiemann or Ford for catheterization of the urethra. This one is twenty-eight inches long and about one-third of an inch in diameter. It is connected at its proximal extremity, by means of two inches of *glass* tubing, with a soft rubber tubing of similar size, five feet in length. This latter piece of tubing is terminated by a funnel.

The stomach-tube may be dipped into warm water before passing it, in order to lubricate its surface or make its passage easier. It is then introduced in the median line beyond the base of the tongue, and the patient is told to swallow. At each repeated effort of deglutition the catheter is pushed further on, until from eighteen to twenty-one inches are introduced. We are then quite sure the tube has penetrated into the stomach beyond the "eyes" by which the food pours into the stomach. So soon as this is accomplished, we raise the funnel to a suitable height—usually the level of the patient's head is sufficient—and pour into it slowly water of about blood-heat, or a little warmer—with the addition of borax. The proportion of the latter may be one drachm to two quarts of water. When we have poured about a pint of fluid into the stomach, or when the patient himself makes *a sign*, or says that his stomach feels distended, we quickly lower the funnel near the floor while *pinching* the soft tube near the funnel with the index finger and thumb of the right hand, so as to retain fluid in the entire length of the tube. So soon as the funnel is lowered into an empty receiving-vessel, on the ground, pressure on the tube is relaxed, and the water containing the washings from the stomach is siphoned off. After repeated washings, or until the stomach is quite clean and the water comes away clear, we pour in the alimentary substances in the same manner we did the hot water for washing. In withdrawing the stomach-tube we should do it quite rapidly, in order to avoid possible rejection of the food. We should also pinch the tube near its proximal extremity in withdrawing it, so that none of its contents will fall upon the carpet or floor.

Of course it is understood that the daily washing of the stomach should take place in the early morning or at a time when it is comparatively or entirely free from food; otherwise, the tube is liable to be choked up by bits of undigested food. Besides, such pieces may be rejected alongside the tube, and possibly become impacted in the larynx or trachea, causing symptoms of asphyxia. Whenever it is inconvenient to perform the washing at a very early hour in the morning, the patient may be allowed some peptonized milk, and the washing may then be delayed for an hour or two. After a certain number of washings, the patient himself may be able to accomplish this little feat quite as well as the doctor. As regards the mere passage of the tube, he frequently learns how to introduce it with greater ease to himself than the physician can command, and, while introducing the tube is perfectly able to make a passing intelligible remark or two.

We now come to the second part of our lecture, viz., the subject of *Continuous Antiseptic Inhalations*. This, gentlemen, has been a subject which I have studied very attentively during the past two or three years. I have examined many different kinds of oro-nasal inhalers, but I know of none so simple, so cheap and so effective as the one I have in my hand. These inhalers were originally made in London, and sold by Squire. I imported a large number of them for use at the New York Hospital, in the out-patient department, and within a brief period, finding them so useful, I have requested Mr. Ford, of Caswell, Hazard & Co., to manufacture a lot for sale to the public generally. The inhaler itself is nothing but a simple sheet of light zinc perforated with numerous small holes and bent into a somewhat pyramidal shape of suitable size to cover the nose and mouth. The apex of the pyramid—which is the part of the inhaler furthest separated from the mouth and nares—contains a small sponge, held in place by thread upon which the inhalant is poured. The inhaler is held fixed before the nose and mouth by two light elastics, which go around the ears.

I have employed, at different times, a large number of inhaling fluids, and many different combinations. The fluid and combination to which I now give the preference is creasote and alcohol, equal parts, to which I also frequently add a like proportion of spirits of chloroform. This combination is certainly very useful in allaying cough and modifying the quantity and quality of the sputa in pulmonary phthisis. I therefore recommend it very warmly. The alcohol is added to the creasote for the double purpose of diluting it and making it more volatile; the spirits of chloroform are added, in view of the experience of Dr. Cohen, of Philadelphia, to diminish local irritation and excessive cough. The inhaler must not be worn too long at first, nor should too much fluid be poured on the sponge at any single time. In either event, instead of giving relief, disturbance is caused; the throat is rendered more irritable and the patient complains of increased soreness and tightness in the chest. Properly and judiciously employed, the creasote inhalant relieves symptoms notably, and in, the beginning, at least, of pulmonary phthisis is, I believe, a means of decided utility so far as the possible arrest of the disease is concerned. It is important that beechwood creasote be employed. At first the inhaler should be worn ten to fifteen minutes every two or three hours; afterward, it may be worn half an hour or an hour at a time, or even longer. When the length of time is gradually increased, only positive benefit will result. From ten to twenty

drops of fluid should be added to the sponge at any one time. If more is added, it will cause undue irritation. The fluid should not be poured on the sponge more than two or three times in twenty-four hours. Precisely the way in which creasote is most useful is, perhaps, difficult to state. By its antiseptic action, it is possibly destructive of bacilli; by its local action and general effect, it is certainly of value in combating catarrhal conditions. Where purulent cavities exist, it tends to destroy or neutralize putridity. These are certainly sufficiently good reasons for its use without pursuing the enquiry further. At all events, these inhalations do good. The physician notices it and the patient affirms it. In many instances they allay cough better than any cough-mixture, and they are certainly free from great objection of destroying appetite, as opium and morphine so frequently do.

We now come to the third and last topic of to-day's lecture and that is, *The Utility of Intra-pulmonary Injections in Pulmonary Phthisis.* I, for one, gentlemen, believe they do good. I also believe they rarely do any harm. They may occasion localized pleuritis, slight hæmoptisis or cutaneous emphysema—but that is about all. They certainly allay cough, diminish the quantity and change the character of the sputa, and in some remarkable manner, have at times manifest power in lessening the distressing symptom *dyspnœa.* This method of treating lung cavities was first employed in this country by Professor Pepper in 1874; since that time, and except by Dr. Pepper himself, I am not aware that any one but myself has practiced these injections any considerable number of times. I have now made between forty and fifty intra-pulmonary injections, and am disposed to continue them in favorable cases. Of course, it is often a difficult thing to follow up any particular line of treatment in private or hospital practice on account of the prejudices or fears of patients. Thus it is with intra-pulmonary injections and in a similar degree, perhaps, with forced alimentation already fully described. Whenever this little operation can be performed, it is, in reality, a very simple matter.

The point of a fine cannulated needle should be inserted in the first, second or third intercostal spaces, anteriorly, or in the axillary region. While there is no risk in making injections upon or outside of a vertical line passing through the nipple on either side, there is danger in injecting at any measurable distance within this line, for fear lest we penetrate the pericardium or one of the great thoracic vessels. The needle should be inserted from two and a half to three inches. Of course, if considered necessary, the slight pain of the puncture may be annulled by the use of local anæsthesia. I have made use of iodine usually in my injections, and am now employing a solution of the compound tincture, of the strength of one part to four parts of distilled water. From ten to twenty minims may be injected upon each occasion, and the injection may be advantageously repeated in four or five days. Previous to the introduction of the needle of the Pravaz syringe, the patient fully expands his lungs, and retains the air in them during the few moments it takes to make the injection. Slight or moderate cough, some expectoration, streaked or not with blood, may follow the injection, and for a day or two there may be slight localized pain in the region where the injection was made. Further than these symptoms, little or no reaction accompanies or follows the injections. In many cases, as in that of the man whose chest I have just injected for the *third* time within ten days, there is no reaction whatsoever at the time of the injection, inasmuch as he does not even cough. I have told you this patient has a cavity at the right apex.

One of the gentlemen wishes to know how I am assured that the point of my needle has penetrated the cavity. The answer is very simple: By giving a slight movement in different directions to the body of the syringe, we can readily appreciate whether or not the point of the needle encounters any resistance, or is perfectly movable in an empty space, or one only partially filled with semi-fluid material. But, presuming for a moment that I cannot be always confident that I have struck the cavity, does it matter? Practically, and according to me, no. That is to say, if you fear any bad results simply because the injection has been made into solidified tissue about the cavity. Indeed, I am more and more convinced that the best indication for these injections is in cases where the apices are *solidified,* and not *softened.* I am borne out in this belief by my own experience. I have already injected in nearly as many cases of phthisical infiltration at its first stage as at a later period, and I have ordinarily seen apparent benefit result. As to the slight accidents that do occur, they can be easily allayed by an anodyne, external irritation of the chest or rest in bed for a day or two. Of course, when we inject a cavity, we have distinct objects in view, and, if we do not reach the cavity, we fall short of doing what we purposed to do. These objects are, mainly, to disinfect the sputa and to modify the walls of the cavity, so that it will, little by little, tend to close up and cicatrize; and, in producing this result, we shall also expect the amount and character of the secretions from the lung cavity to be sensibly changed for the better. When we inject solidified lung tissue we expect something very different. If there is an underlying inflammatory cause, in very many cases of phthisis—and I still believe there is—we shall modify this inflammatory exudation considerably. We shall, perhaps produce such changes in it as to render it fluid and easier of resorption or expectoration. As to the influence of iodine or other injections on the growth or vitality of bacilli, I have yet no very positive and determined views—any more, indeed, at this moment, than I feel perfectly sure in regard to the real, active rôle of the bacillus itself. Only a few months ago, the chorus

of the supporters of Koch was somewhat after this fashion :

"What is consumption? The bacillus.
What is the bacillus? Consumption.
But what causes consumption? Why, the bacillus.
But what causes the bacillus? Consumption?"

And now I ask, in the words of Professor Loomis, "whether they [these microbes] are the *cause* or the *scavengers* of disease?"

Clinically, of one thing I am quite confident, viz., intra-pulmonary injections of iodine benefit phthisical sufferers. Why not, therefore, give them the opportunity of the treatment, and await patiently the auspicious day when even changing theory may be wholly favorable to their use.

In conclusion, let me urge upon you all to earnestly consider the facts brought to your attention in this lecture. It is a subject pregnant with the most vital interest. Our hospitals and dispensaries show a fearful death-rate from phthisis. Ordinary methods of treatment are confessedly disheartening, by reason of their very slight influence in arresting the march of a dread disease, when, moreover, the odds are, for other and manifest reasons, many against the poor sufferers.

I have studied with you a series of topics which makes me more hopeful of what I may be able to do for the arrest or cure of pulmonary phthisis. In this line of research may all of you find renewed courage and conviction. Perhaps some one among my hearers may yet discover the "arcana" of science in its conflict with this destroyer of our fellows.—*College and Clinical Record.*

ON THE THERAPEUTICS OF NASAL DISEASES.*

By Dr. George Catti,

Assistant at the Vienna Laryngoscopic Clinic.

Within the last few years great progress has been made in the therapeutics of the disease of the nasal cavities, and many morbid conditions of these regions, formerly considered as incurable, can now be treated successfully by proper patience and perseverance. The therapeutic procedures to this end, consist in the thorough cleansing and washing out of the nasal passages by suitable measures, and in the direct application of different medicaments.

As regards the first methods referred to; the snuffiing of liquids, the drawing in of fluids through the nose (Siegle, Stork, Wendt), the syringing of the nasal passages (Schrotter), and the various forms of nasal douches (O. Weber, Wendt), have all been recommended as eminent suitable methods of procedure, and their employment has been productive of more or less satisfactory results, so that there is uo necessity of entering into their further consideration. Medicinal remedies have been employed in various forms, either after, or without, the previously mentioned measures for cleansing the passages. Remedies can be applied with ease and certainty to the anterior parts of the nasal cavity by means of the camel's-hair paint brush, or also with very excellent results by means of long tampons of charpie, smeared with ointments, or impregnated with suitably medicated liquids, as recommended by Hebra. We also, by the mouth, can treat directly, either with a suitably bent probang, sponge-holder, brush, or portecaustic (Semeleder, Turck, Stork, Schrotter, W. Myer) the diseases of the naso-pharynx, and the various pathological conditions which may occur in the, posterior parts of the septum and turbinated bones.

The middle and upper parts of the nasal passages, however, are very difficult of approach for the purposes of direct and thorough local medication, and when we consider the obstinate character of the diseases affecting these last named regions, and the obstacles to be encountered in their treatment, it is not to be wondered that all therapeutic measures yet proposed have met with but scant success. Any progress in this direction is therefore to be hailed with gratification.

The snuffing of liquids and powders, the insufflation of powdered drugs, and the "douching" of medicated fluids through the nasal passages, are open to these serious objections: *first*, but a small portion of the affected surface can be reached; and, *second*, that the diseased mucous membranes come in contact with the remedies for only a short space of time. Indeed, for excessive hypertrophy of the mucous membranes and for ulcerations, Prof. Schrotter uses the the porte-caustic entirely, with the most satisfactory results. (*See Laryngologische Mittheilunger. Wien*, 1875).

About fifteen years ago Professors Sigmund and Schuh, who were not entirely satisfied with suppositories of cacao-butter, sought for a more satisfactory vehicle. This was found in *gelatin*, and various bougies and suppositories were made with this material, and were found by experiment to keep extremely well. About two years ago, also, Prof. Braun employed gelatin vaginal suppositories, made in the shape of a ball.

Several months ago I had prepared for me some gelatin bougies suitable for introduction in the nose. These nasal bougies were from 8-12 centimetres long (3-4½ inches), 4-6 millimetres in thickness ($\frac{1}{6}$-$\frac{1}{4}$ inch), conical in shape, and very soft and smooth. When employed, the smaller, pointed end of the bougie is placed in the nose and then rotating, pushed gently backwards until it is completely in the nasal passage.

If the bougie is pushed backwards in a horizontal direction, as it should be, so that it enters the inferior nasal meatus, by examination with the rhinoscope we can see clearly the smaller end of the bougie projecting from between the septum and the middle turbinated bone. The length of the nasal passages varies greatly at different ages and in different individuals, so that when the passage

is short and the bougie pushed in too far, it projects more or less (1-4 centimetres) into the naso-pharynx, and hangs down back of the soft palate. When in this situation, the patient is sensible of a disagreeable tickling in the neighborhood of the soft palate, producing an unpleasant sensation of strangling. Through contraction of the levator and tensor-palati muscles, the bougie will gradually be forced more and more backward, until, finally, it falls into the pharynx or the mouth. This can, however, be entirely avoided, if we previously measure the length of the nasal passage with a sound, and cut off the bougie accordingly.

If the bougie is wrongly placed in the nasal cavity, we will see in the rhinoscope image its smaller end projecting from between the middle and lower turbinated bones. If it should be pushed in vertically, it can not be seen with the rhinoscope at all, as it will lay more or less curled up, entirely concealed in the anterior nares.

The introduction of a foreign body into the nose almost always causes increased secretion, and from this cause the gelatin becomes liquefied and flows out of the anterior nares. This is to be prevented by tamponing the two apertures with some charpie, so that the melted gelatin is caused to flow out through the posterior nares and into the vault of the pharynx, from whence it is to be removed by coughing or " hawking." In from one-half to two hours the bougie will be entirely dissolved.

The employment of these gelatin bougies for the treatment of diseases of the nasal passages would seem to be extremely rational; *first*, they afford a means by which medicaments can be kept in contact a long time with the diseased mucous membrane; *secondly*, they are easily tolerated by the patients; and, *thirdly*, they produce, even if in only a slight degree, a mechanical pressure upon the nasal mucosa. The introduction of the bougie can be accomplished very quickly and easily, so much so that every patient can learn, without trouble, to apply them. They should be used every day or every other day, in one or both nostrils, as the case may require, or they can be employed in both nasal passages at the same time.

I have now, for a number of months, treated various cases of nasal disease by this method. The most excellent results were obtained in cases of obstructions of the nasal passages following chronic catarrhs.

Patients who for a long time had been treated unsuccessfully according to various other methods, were completely relieved of their troubles by the employment, for comparatively short periods, of the gelatin bougies. The principal remedies employed were copper sulphate, and zinc sulphate, 0.02 grammes (3-10 grain) in each bougie, and other astringents.

This method I believe will also be found to be particularly valuable in the treatment of those obstinate chronic catarrhs which periodically affect many persons in winter. Many of these individuals, such as public singers, actors, teachers, etc., who often find themselves in this miserable condition, can be practically relieved of their difficulty in breathing, etc., by the regular employment of these nasal bougies.

In such cases we find on examining the nasal passages from the front, only an excessive redness of the mucous membrane, accompanied by a moderate amount of swelling. The rhinoscopic image shows more or less extensive swelling of the mucous membrane on one or both sides of the septum, accompanied, perhaps, with a moderate amount of swelling of the one or the other turbinated bone. This condition, therefore, does not explain the true cause of the great difficulty in breathing through the nose, which is such a troublesome and annoying accompaniment of these cases. The real seat of the trouble lies in the middle and upper parts of the nasal passages, and consequently in locations where a direct examination can not be made except with a delicate probe: this easily makes a passage for itself between the soft and slippery (*succelenten*) adenoid tissue.

The employment of the medicated gelatin nasal bougies, has furthermore produced moderately good results, in the treatment of chronic catarrhs of the naso-pharynx (post-nasal catarrh) accompanied with hypertrophy of the pharyngeal tonsil. Excessive hypertrophy of this gland, so that it entirely obstructs and overhangs the posterior nares, is seldom seen. In three years' experience amongst the great mass of materials present at the clinic of Prof. Schrotter, I have noticed it but twice. For the most part, the hypertrophied tonsil does not reach over the septum, and overhangs the upper third or at most the upper half of the posterior nares. The deafness and difficulty of breathing through the nose, which accompany these cases, are in consequence of the simultaneous presence of chronic catarrh of the mucous membrane of the eustachian tube, and chronic catarrh of the nasal passages. Through treatment of the last trouble, with the nasal bougies and by painting the pharyngeal tonsil with tincture of iodine, we can often bring about enough of a cure to at least cause a great amelioration in the previous condition of the parts. Cauterization of the gland with the solid stick of nitrate of silver has also been often employed in Schrotter's clinic; less frequently the application of caustic potassa. The employment of the galvano-cautery, and the extirpation of the pharyngeal tonsil (Michel, Schrotter, W. Meyer, Stork) are, besides, methods well known and approved. In many cases, however, owing to the youth or the nervous condition of the patient, their performance is impossible, and resort must be had to the previously described methods of treatment.

The gelatin nasal bougies have been also used in the treatment of scrofulous and syphilitic ozœna, a thorough cleansing of the nasal cavities and the removal of the decomposed purulent secretions having preceded their application. Some very

remarkable and satisfactory results were obtained, but as the subject is yet under investigation, its consideration will be deferred until a fuller report can be made.

Finally, this method was employed with the most excellent results in the ozœna following ulcerations and necrotic processes in the nasal cavities. Often was it noted that after the removal of some offending sequestrum of bone, the difficulty of cleansing the passages and the acute pain still continued. This was caused by the unhealthy and foul-smelling purulent discharges, which drying very quickly into broad, thick black scabs, could not be removed by the ordinary "douching" process, so that the dressing forceps, or some other forcible means, had to be employed to effect their removal. These scabs obstructed the free flow of the liquids and gave rise to the pain. The regular and continual employment of the gelatin bougies, medicated with carbolic acid or idoform, and the plugging up of both anterior and posterior nares so as to prevent the access of air, so hindered and interfered with the formation of these scabs that a speedy healing of the parts was the result.—*Clinical Notes.*

TREATMENT OF LUPUS.

Dr. Scwimmer reports that after trial of the various methods of treatment for lupus, he has found none which, taken singly, can be pronounced suited to every case. Severe local measures are capable in certain cases of doing more harm than good. Among the most useful means of treatment must be reckoned pyrogallic acid. Applied in the form of a ten or fifteen per cent ointment, three or four times daily, it soon transforms the morbid growth into a pulpy, grayish substance. Although the cicatrix looks clean after this treatment, it almost always contains tubercles, which in many cases renew the disease. To prevent this result he hit upon mercurial plaster, which he employed in conjunction with the former. The pyrogallic acid is seldom able to produce total destruction of lupus tissue alone, and it is well known that the gray plaster has little influence upon the lupoid infiltration by itself; but by using the acid to destroy the lupus tissue, and the plaster afterwards to promote absorption, they act very efficiently. In a series of very malignant cases he pursued the following course with success:

For several days after admission the diseased surfaces were kept completely covered with vaseline smeared on cloths, in order to facilitate the removal of all secondary morbid products, such as scabs, etc. A ten per cent pyrogallic ointment is then applied over the same area, and renewed two or three times in the twenty-four hours. This dressing was employed from four to six days, or, in cases where the cutaneous tissues were insensitive, from six to seven days. On its removal, vaseline was again applied for one day, after which the entire suppurating surface was covered with mercurial plaster. Healing began in from ten days to a fortnight in most localities, but isolated nodes and tubercles could still be detected in the cicatrized integument. Pyrogallic acid should once more be applied for three or four days, causing renewed suppuration of the recently-healed infiltrations, while those more firmly skinned over remained unaffected. When treatment was repeated, so much pain was experienced in many cases on the second day, that mercurial plaster had to be substituted for the ointment; but if this was not the case, the latter was left on for two days longer. The gray plaster was allowed to remain—being changed once daily if the suppuration was trifling, twice or thrice if it was more profuse—until cicatrization was complete, which sometimes required four weeks. If the complaint was peculiarly indolent and obstinate the same process was gone over for the third time, but treatment never extended further than this.

An accurate and unprejudiced comparison of the results obtained in this way, with those following other methods, has proved decidedly favorable to the former. A speedier and much better resolution of the more advanced and wide-spreading growths was found to occur under the combined pyrogallic and mercurial treatment than could have been brought about by the united agencies of scarification and the thermo-cautery.

In conclusion, he states that, "in order to make our estimate more precise, and to obviate any misconception which might cause the means I have recommended to be regarded in the light of a lupus panacea, I present the following summary of the objects which they may be reasonably expected to accomplish:

1. The severest and most extensive forms of lupus—those hitherto most difficult and frequently impossible to manage—may be often sensibly ameliorated by these simple and comparatively painful procedures.

2. The application of mercurial plaster immediately after several days' use of pyrogallic acid, is able to bring about complete absorption of the tubercles and infiltrated cells at some points, while at others it is remarkably effective in arresting the morbid growth, and forming complete and smooth cicatrices, results which are not obtained by the use of either remedy alone. The combined treatment may be employed two or three times in succession without inconvenient consequences.

3. The more circumscribed forms of lupus are less amenable to this method than the diffuse serpiginous, and ulcerated varieties,—perhaps for the reason that in the latter the corium affords a less congenial breeding-place for the morbific cells. Yet sometimes in these same cases, better results are obtained by a previous deep scarification of the affected parts, although scarification alone will prove entirely ineffectual.

4. The duration of treatment is shorter than by other methods, not exceeding three or four months in the worst cases.

5. Relapses are to be looked for here no less than after other processes, but are to be least apprehended when the treatment has been thoroughly carried out—i. e., has terminated in complete and uniform cicatrization.

6. This method is indicated in the most extended form of lupus, whether occurring on the face, the body or the extremities, and is especially suitable in neglected cases which have received little or no previous treatment.

7. The affected surfaces after healing retain their redness for a considerable period. The discoloration gradually fades, however, and its disappearance can sometimes be hastened by using an ointment of bismuth of zinc."—*Glasgow Med. Jour.*

A NEW METHOD FOR APPLYING REMEDIES TO THE EAR.

By C. L. Mitchell, M. D.

Under the title "Ear Cones" the writer desires to call attention to a new series of preparations for the local treatment of diseases of the ear. They are especially fitted for the application of remedies in otitis externa; acute, sub-acute and chronic otitis media purulenta; sub-acute complicated and chronic inflammation of the cavity of the tympanum; and in fact all sub-acute or chronic aural inflammations attended with muco-purulent discharges. also offer a convenient and efficient method for applying different sedative remedies in painful conditions, and for treating the various forms of eczema, pruritus, and other troubles which affect the external auditory canal.

These remedies as their name implies, are in the shape of a truncated cone ¾ inch long, $\frac{3}{16}$ inch in diameter at the larger end, and $\frac{5}{32}$ inch in diameter at the smaller end, which is rounded.

These cones are made of medicated gelatin and when placed in the cavity of the ear, melt slowly and thus bring the medicating ingredient into operation upon the surrounding parts. When used they should be greased or dipped in warm water for a few seconds, and then gently pushed into the ear (the small end first), either by the fingers or with a small pair of forceps.

The idea of these preparations is not original with the writer, for he is familiar with the fact that for a number of years similar preparations have been in use in the Ear Clinic of the Vienna general hospital, by Prof. Joseph Gruber, the distinguished aurist. He believes, however, he is the first one to introduce them to the American medical profession; and considers that the conical shape, as above suggested, will be found to be more convenient and advantageous than that of the balls almonds, as employed by Prof. Gruber.

The Ear Cones should be a very convenient method of treatment for aural troubles, and by the length of time they remain in the auricular cavity should cause a very thorough and prolonged action of the remedy. Drops and solutions excercise but a transient effect, ointments are troublesome to apply, and act slowly, so that there would seem to be ample room in the therapeutics of the ear for a better method of local treatment. With children and nervous patients particularly they should obviate much troublesome manipulation and hence be very gratifying to both patient and doctor.

As regards their actual therapeutic value the writer is not yet able to speak with authority. They have been employed to a limited extent by Prof. Lawrence Turnbull, in the ear clinics of the Jefferson College Hospital, with excellent results, but a more extended and thorough trial is necessary before positive and authoritative statements can be made. Attention is now called to their evident advantage, and the future verdict remains to be pronounced by the members of the medical profession, who will doubtless give them a careful and thorough trial. In conclusion, a short abstract from the pen of Prof. Gruber, (*Wiener Allegemeine Zeitung*) concerning these gelatin ear preparations, may not be considered out of place:

"I have recently been investigating some new "methods of treating diseases of the ear by means "of medicated gelatin preparations. These were "prepared for the external auditory canal in a "manner similar to the nasal bougies suggested "by Prof. Catti, and which have been spoken of "in the highest terms. According to my instruc-"tions they were made in the shape of little balls, "or of almonds, and contained different quantities "of various remedies, such as sulphate zinc, boric "acid, bichloride mercury, iodoform, etc. In "painful affections, I employed those medicated "with ext. opium aq., or with morphia.

"These preparations can be applied with the "utmost ease. After suitable cleansing or syring-"ing of the auditory canal, they are put in position "by the fingers, or, with the assistance of a small "pair of forceps, and then pushed back into the "auditoroy cavity, if necessary, by a small camel's "hair brush. The external orifice is then to be "plugged up with charpie and the remedy left in "the passage. There it gradually liquefies and "operates gently and for a long time on the "diseased structures.

"As the result of my employment of these pre-"parations, I unhesitatingly say that I consider "them necessary and even indispensable in otolo-"gical practice. In properly selected cases I have "obtained better results by their employment than "by any nther method of applying remedies which "I have ever followed. Especially can I re-"commend their use in exudative inflammation "of the middle ear attended with perforation of "the tympanum; in these cases the swollen and "stiffened mucuous membrane of the cavum tym-"pani renders such remedies exceedingly desirable.

"By the gentle and gradual liquefaction of "these remedies they can be allowed to remain in "the passage for a long time without harm to the "patient, and their indicated effect is so aug-"mented by the protracted contact of the gelatin, "that the medicated applications require to be "made with much less frequency.—*Cliuical Notes.*

THE TREATMENT OF MEMBRANOUS DYSMENORRHRA.

The treatment of this affection is necessarily both palliative and curative. While the patient is suffering during the expulsion of the membrane, it is very necessary to relieve the pain as far as possible. This, of course, can be most promptly done by the use of opium, which should be avoided, if possible, however, because of its after-effects.

Chloral hydrate answers fairly well in some cases. I am not sure that it has any advantages over chloroform, camphor, and belladonna, or conium and, *Cannabis indica;* in fact, in the majority of cases, one has an opportunity to try several agents, and of course, the patient will decide which gives most relief. Indications for general treatment are to quiet all nervous disturbance and to improve the general nutrition of the mucous membrane. It so happens that when the first part is attended to the latter will follow in due order.

To quiet the nervous irritation and disturbance there is nothing that equals the bromide of sodium. This should be given in twenty or thirty-grain doses, three times a day, for ten days or two weeks before the menstrual period. And, if the pain is not severe enough to require the addition of some of the remedies already named to relieve pain, it may be continued throughout the menstrual period and several days after. From this it would appear that the bromide is to be used continuously; but one or two weeks in each month it can be omitted. When the bromide has been employed for some time, and it seems desirable to give it up, conium may be given in moderate doses combined with camphor, if the patient is weak. If there is any evidence of the rheumatic diathesis, the bromide of lithium should be given. Next to quieting the nervous system, any debility that may exist should be overcome by nerve tonics. Undue nervous excitation so often goes hand in hand with nervous depression that in many cases it is necessary to combine the tonic and sedative treatment.

After subduing all nervous disturbances, I give the patient the iodide of sodium in case she is in fair strength and inclined to flesh. If there is anemia, I prefer the iodide of iron. If these did not accomplish the object, I have employed mercury, giving it in small doses, never continued long enough to produce salivation, carefully watching to avoid this. In cases of anemia where I have feared the debilitating effect of this alterative, I have given the bichloride of mercury with iron. After keeping them upon this treatment until I could see some evidence of its effects, I have then put them upon iodine and arsenic.

In regard to local treatment, I have employed alteratives and sedatives almost exclusively. Of these I have found iodoform most effectual. I have also used iodine and mercury with advantage. In cases where I have found any complications I have carefully attended to them, restoring displacements and correcting flexions, and so on. When the canal of the cervix has been at all constricted I have enlarged it by incision and dilatation.

When the congestion which occurs at the menstrual period does not subside in a few days, I have employed the warm-water douche. After this, I have applied to the cavity of the uterus small bougies of cocoa-butter with as much iodoform as it would take up. Three or four grains of iodoform mixed with vaseline that has been liquefied by heat, and introduced through the pipette, is perhaps the best method of applying it. These have been introduced once a week or once every five days. When there has been much tenderness, and the use of the pencils has caused pain, I formerly used aconite and opium and iodine; this I have introduced into the cavity of the uterus. I am now trying cocaine to subdue the tenderness as a preparatory means to the use of iodoform. But so far this new remedy has not been a perfect success.

In cases where this has failed and the uterus was not especially sensitive to intra-uterine medication, I have instilled into the uterine cavity a few drops of a five-per-cent solution of carbolic acid, making one application a few days after the menstrual flow and not repeating it until the next period. In the interval I have used the iodoform. I have also used the fluid extract of conium and *Hydrastis canadensis;* but this I have found gives more pain than any of the other applications that I have used; and so of late I have used an infusion of the hydrastis alone, which appears to answer as well and gives less pain.

BROMIDE OF ARSENIC IN ACNE.

Dr. Henry G. Piffard, writing in *Journal of Cutaneous and Venereal Diseases*, says:

Conceiving, from purely theoretical considerations, that it might be useful in certain cases, I first tried it in the spring of 1878 in a case of pustular acne vulgaris of moderate severity, and gave it in doses of one milligram (gr. $\frac{1}{65}$) three times a day. Within a week the patient, a young lady, returned, complaining that her face was much worse. On examination, I found on each side of the face a crop of miliary pustules in addition to the acne. The arsenic was discontinued, and a placebo prescribed. This was followed by improvement for a week, when the arsenic was resumed in much smaller doses, and in three or four weeks the case was substantially well. In a second case I had a similar experience, and in a third case I prescribed an alcoholic solution, containing one grain to the ounce, and directed that two drops should be taken night and morning. This patient I did not again see for nearly six months, when she informed me that the medicine had, in a few weeks, accomplished all that she desired. Since then I have used bromide of arsenic with much satisfaction in pustular acne, but have not tried it in other varieties of this affection, nor in other cutaneous diseases.

CONSTIPATION HABIT.

The subject of constipation is so extensive, involving the discussion of so many diseases and remedies, and with its diarrhea of literature covering so much ground, that I forbear, for want of time, if nothing more, from entering into a full consideration of the subject.

That it is often a symptom of disease or a disturbance arising from disease, I need not discuss; but I wish at this time to call brief attention to it as a disease in and of itself, in order to elicit discussion, and thereby enlarge our ideas.

The constipation habit is certainly a perversion of an important function, and is often productive of great harm and suffering. The normal act of defecation, as a rule, occurs regularly once every twenty-four hours, and with a majority in the early part of the day, before or soon after breakfast. In health the call to evacuate the bowels is a peculiar sensation that cannot be understood. If not heeded it may soon cease, and the call not return for an indefinite length of time. Immediately preceding this sensation is the peristaltic contraction of the sigmoid flexure which ejects its contents into the rectum, from which arises the warning and call for voluntary muscular assistance, that is so often unheeded or put off to a more convenient season. But the rectum must be relieved, and if not in the natural way, then anti-peristaltic action takes place, and the load is sent back whence it came, a burden and a log, blunting that delicate sense of the bowels.

Women, I think, neglect the function more than men. This is often from a false sense of modesty, their natural delicacy leading them to endure while away from home, traveling or in society, rather than to withdraw with eyes upon them to a strange shrine devoted to *cloacina*. Even at their own homes, where there is a lacking of modern conveniences, the inclemency of the weather, the exposure to cold, and the foul breath of the vault cause so much dread of the simple act of defecation, as to lead them to procrastinate, to the utter demoralization of the normal defective act. I have no doubt that the trammels of fashionable clothing also interfere to some extent. The considerable straining which is sometimes required to complete the act, may be unattainable from the clothing limiting too much the action of the diaphragm and abdominal muscles.

Sedentary habits which deprive the bowels of the gentle stimulus of exercise is one cause of constipation; and when to the sedentary habits is added position of posture which cramps and crowds the bowels, as is the case with the shoemaker, habitual constipation is almost sure to follow.

The abuse of cathartics is a fruitful cause to induce and confirm this habit. What with the anti-constipation pill, wafers and pellets flooding the land to dredge the *primæ viæ* on the first indication of its filling up, or to be used from the fear that it will fill up, it is a wonder that nature's *cloaca* is maintained at all.

Errors of diet, though not mentioned first, are not least in causing this habit, which is, perhaps, more prevailent in this country than in any other; and some one has said that it is because we eat too little soup. Water as a solvent aud a diluent acts in the alimentary canal a very important part, and soup eating should certainly be encouraged in order to counteract the tendency to take our food too solid, and to favor the fecal current.

Whatever line of diet we are in the habit of taking, and the bowels are normal, if we make a sudden or marked change in our diet, it is often attended by bowel disturbances in one way or the other. I have been in a position to observe a great many persons who have made sudden changes, particularly from a mixed, generous diet, to a vegetarian diet, which, from its bulky nature, imposes more work on the bowels than they are used to, often beyond their working capacity, and the result would often be acute constipation. The next step then, was to use the much-abused water enema, which to the overworked bowels, seemed a Godsend, but by frequent reputation proved a blight to their work, making them a sluggard in the human economy.

I give one case to illustrate:

Mr. S. had been a vegetarian for five years or more, and had adopted two meals a day. He was in fair general health for one of such habits, but his great difficulty was no natural action of the bowels, which had existed for the last five years. His sole reliance for a movement was the coarse food and water enemata, which he had come to take regularly.

He consulted me, ostensibly for hemorrhoids, which he said the doctor who had treated him told him he had had, and who had expected to operate on him. On making a thorough exploration of the rectum, I was not surprised to find no hemorrhoids, for he gave no symptoms of any. I found, however, a very large, pouch-shaped rectum, with flabby, relaxed and attenuated walls, which I attributed to the protracted use of the water enemata.

I changed his diet, stopped the enemas, gave him three meals a day, had him drink four or five goblets of water per day, and had him inject on retiring one third of a cup of cold water to be retained. Ordered daily massage and kneading of the bowels, with a mild faradisation of the same; also ten drops of fld. ext. casc. sag. four times a day. In four weeks' time he had natural stools, without the use of medicine or treatment of any kind.

A too concentrated diet may cause this habit, but I have observed no danger in this direction. A variable appetite, which makes extremes in quantity and quality of food, is sometimes a cause, but as this would lead us to discussion not intended at the time we desist. I have often observed that a loug journey by rail will produce a severe constipation, and have wondered if the constant jarring of the cars have anything to do with it.

The more difficult a disease is to treat successfully the longer the list of remedies employed; that judging from the length of the list in this case, one would be almost discouraged from attempting a cure.

Yet with clear ideas of causes, the indications for treatment are simple, and with the hearty co-operation of the patient the physician may feel quite certain of gaining, sooner or later, the desired result.

The following I give as a general outline of the treatment, which of course must be varied somewhat according to the special indications of each case:

Regulate the diet, having three meals per day of palatable, nutritious food, not too bulky or too concentrated. Have soup at least one meal each day.

On rising, at least an hour before breakfast, drink one or two large goblets of water. If the stomach is weak and inclined to chronic gastritis, I order the water to be drank hot. Twenty or thirty minutes following the water, give the bowels a thorough kneading for ten minutes. Then assume erect position, with arms above the head and left foot on a line with the right and placed in front of it, bend forward until the knuckles of the closed hands touch the floor, then back to the first position, repeating this five or six times; then, reversing the position of the feet, repeat the movements. This is an excellent exercise for the abdominal muscles and an inactive liver.

At night, also, before retiring, drink a goblet of water, and if there are indications of dryness of lower bowels I use an enemata of one-third to one half cup of water, to be retained.

Flushing the sewer may be a good practice with some, making the stomach the flooding tank; but we must use great care not to interfere with digestion.

When it is available, I often order a fifteen minutes' daily application of electricity to the abdomen, using the Faradic current.

If any medicine is demanded, the first on the list is cascara sagrada. I think it is an excellent "peristaltic persuader." It renders in my hands the most efficient service in small and repeated doses.

I impress it upon my patients to make it a daily practice to go stool at a regular hour, to induce if possible, by voluntary muscular effort, a movement, remembering that this measure alone, if persisted in, will oftentimes overcome this deplorable habit. Perhaps the best time of the day for this is soon after breakfast. Patient continuation in this line of treatment will do a great deal to dispel this *bete noir* of medical practice.—*Detroit Lancet.*

A SIMPLE FORM OF NASAL DOUCHE.

Frank Woodbury, M.D. *Medical Times.*

The douche consists of an A shaped elbow of glass tube, to which is attached a short (about three inches) piece of ordinary rubber tubing on one arm, and a long (twenty inches) piece from the other, the latter having a hollow, somewhat conical, glass nozzle, so as to occlude the nostril when pressed into it, and keep in the fluid delivered through a central opening. The short end is also tipped with a glass tube so as to hold it open and prevent collapsing. When not in use the entire apparatus is contained in a small paper box (2¼ × 1¼ × 1 inch), which may be conveniently carried in the pocket, or may be carried in a valise without breaking. In order to use the douche, a glass tumbler, or any similar receptacle, should have placed in it the required amount of warm water (100° F.), medicated as desired; the douche should be immersed in the fluid, and then the long tube (tightly pinched between the fingers so as to retain its contents) is drawn out of the reservoir until the glass elbow hooks over the edge of the cup, where it is self-retaining; the fluid will flow from the nozzle as long as it is depressed below the level of that in the receiver. The flow can be interrupted by simply dropping the nozzle back into the tumbler. It fulfils perfectly the purposes of a nasal douche, where such an instrument is desired. The douche may also be used for acute affections of the ear (after scarlet fever, etc.), for the eye, and generally for such purposes as an instrument of this size is adapted; among these may be mentioned the administration of milk, broth, etc., to patients unable to sit up, and too weak to drink in the ordinary way.

The advantages of thisf orm of nasal douche are: (1) its simplicity, there being no parts that can rust or get out of order; if any portion is broken it can be replaced at a trifling cost; (2) its convenience, being compact in form, occupying little space, taking but a moment to put into operation; (3) its safety, the stream being delivered without force, simply by gravity, it is almost impossible that the fluid should be forced into the middle ear; and (4) its efficiency being granted, its chief advantage is that it is the most economical douche that is in the market, its cost being insignificant.

In common with every one engaged in general practice, I have found patients for whom a nasal douche might be useful for a short time, but the comparative expensiveness of the Thudichum's douche, and its danger of breakage, have often made me hesitate before ordering it. Any one can make one for himself in a few minutes at a cost of about twenty-five cents. The rubber tubing costs ten cents per foot, and the glass a trifle only. Having given it to Mr. Hayes, of the St. George Pharmacy, with the request that they should be made and sold at this price (twenty-five cents) to patients, he very kindly consented; so that if any one does not wish to take the trouble of making the douche, he can get it by sending this amount to Mr. Hayes, Broad and Walnut streets, Philadelphia.

THE TREATMENT OE TYPHOID FEVER.

Dr. N. S. Davis, in speaking of his treatment of typhoid fever at the Mercy Hospital, Chicago, recognizes fever indications to be fufilled, or objects to be accomplished.

First, it is desirable to suspend, as far as practicable, the further action upon the patient of all the causes that may have contributed to the development of the disease.

Second, to restore the natural condition of the general properties of the tissues, and thereby retard or arrest those perverted molecular movements which constitute the disturbances of nutrition, secretion, excretion, etc.

Third, to promote the action of certain excretory organs, and thereby deterioration of the blood by the accumulation of the products of tissue-changes or waste matter.

Fourth, to counteract the development of important local diseases, either in the head, chest, or abdomen.

Fifth, to sustain the patient with nourishment suitably adjusted, both in quality and quantity, to the different stages of the disease.

The first indication is fulfilled by proper regulation of the patient's hygienic surroundings, and the exhibition of *potassium chlorate* in dilute acidulated solution. If this indication be fulfilled, and if the patient be supplied with "proper nourishment, in proper quantities," twenty-nine out of every thirty will recover without medication of any kind.

To fulfill the second indication, chief reliance is placed upon the "excitors of vital affinity," oxygen, potassium chlorate, sodium chloride, mercury bichloride, iodine, the mineral acids and cold water.

The third indication is met by nitrous either, *liquor ammonii acetatis*, and digitalis.

Under the fourth indication, attention must be directed to a number of organs.

1. The impairment of the functions of the brain and important nervous centres, "more especially those centres that govern the action of the vaso-motor, cardiac and respiratory nerves," is best remedied by the selection of those agents which increase the oxygenation and decarbonization of the blood. Strychnine and the mineral acids are the most effective drugs in this connection.

2. Hypostatic congestion of the lungs, muscular weakness of the heart, capillary bronchitis, and broncho-pneumonia are conditions which contraindicate alcohol in any form. Milk, beer, tea, eggs, coffee meet the indication.

3. The changes in the alimentary canal, mesentery, splen and liver demand the most rigid scrutiny.

The pathological changes in the glands of Peyer and Brunner are of greatest importance.

The mineral acids, nitrate of silver, oil of turpentine and strychnine "improve the tonicity of the smaller vessels, lessen passive congestion and exudation, and arrest the tendency to softening and disintegration by increasing the general property of the tissues, called vital affinity, or by increasing the vaso-motor nervous influence, or by both.

The fifth indication is fulfilled by the administration of proper food. Three propositions may govern the practitioner in this matter.

"First, choose such articles for nourishment as, either separately or conjoined, shall contain all the elementary constituents entering into the composition of the blood and organized structures of the human body.

"Second, the article or articles selected should be so prepared that when taken into the stomach they are capable of being taken up and assimilated with but little influence from the gastric and other secretions usually required for the digestion and absorption of ordinary food in health, because these secretions are generally much diminished, especially during the middle and later stages of the disease.

"Third, the quantity given at any one time should be so limited that it will be all absorbed or assimilated before any part of it has time to undergo fermentation or putrefactive changes, by which tympanites and the irritation of the glandular patches in the ileum might be increased, sufficient to afford the patient a fair degree of support."

Meat broths, from either mutton, beef, or chicken, seasoned with salt, milk, buttermilk, milk-whey, tea, coffee and water, correspond to these conditions.—*Ther. Gaz.*

TREATMENT OF CROUP WITH MURIATE OF PILOCARPINE.

Charles Ultes, M.D., Lansing, Mich., communicates the following to the *Therapeutic Gazette:*

I have treated in all five cases of the membranous variety, four cases of mild or night croup, and three cases of diphtheritic croup (laryngeal stenosis), all of which recovered, with the exception of one, the child being attacked the two previous nights, playing during the day. On the morning of the third night I was called and found the child in a condition in which neither tracheotomy nor pilocarpine would be effective; the child died with convulsions two hours after my arrival.

In severe cases it sometimes takes from four to five days until the severe symptoms are passed. The medicine must be used vigorously until relief is obtained.

When the bronchial tubes are filled up, and cyanosis and choking sensations prevail, a dose of syrup or the powder of ipecac should be used to throw off the partially-dissolved membrane and accumulated phlegm. The nausea caused by the ipecac passes off as soon as the vomiting is over, leaving no debility whatever.

It is astonishing what large doses of ipecac may be taken sometimes by children without producing emesis.

The dose of muriate of pilocarpine is from one-fifteenth to one-sixth of a grain, rubbed up in sugar of milk, according to the age and susceptibility, one tenth of a grain being the average. It is probable that the hypodermic method would act quicker and more energetically, but I am well satisfied with the effects obtained when given by the mouth; but I should not hesitate at all to use it hypodermically in desperate cases, mainly with convulsions.

Sweating is not very excessive, even when large doses are administered, and I never saw a case of croup in which the medicine produced any flow of saliva, such as we are accustomed to see in adults. In mild cases, or cases of night croup, mainly in cases of second or third attack, the effect of the pilocarpine (one tenth of a grain) is a sweeping one; a few powders in hourly doses will act like a charm, allaying cough and discomfort, producing rest and sleep.

Diphtheritic croup (laryngeal stenosis) should be treated like any other case of diphtheria, only pilocarpine added to it. In my three cases, to avoid sepsis I used calcium sulphide, one tenth of a grain, every three hours, in conjunction with pilocarpine. But in this variety I think the pilocarpine only acted as an auxiliary, as former cases treated with pilocarpine alone died.

I do not want to be understood that pilocarpine is the only agent in croup to be relied upon; on the contrary, we must treat the symptoms and meet the complications to obtain the best of results.

When the action of the heart becomes weak, as it frequently does, whiskey or brandy are indispensable, either diluted in sweetened water, or in the form of milk-punch, etc. Milk is the main diet in croup, and should be given *ad libitum*.

When the temperature is elevated open the bowels with a few small doses of calomel and prescribe the following:

℞. Acid salicylic ..... ʒ ii;
Sodii bicarbon..... ʒ i;
Glycerinæ,..... ℥ i;
Aquæ, q. s. ad., ... ℥ iv; M.

S. Take one teaspoonful every two or three three hours.

If the urine is high colored and scalding on passing, a little nitrate and chlorate of potassium added will relieve these symptoms promptly.

In some cases I tried the fluid extract of jaborandi, but I never obtained such decisive effects as I did with pilocarpine. I am quite confident that if the muriate of pilocarpine is used in this disease, as stated above, loss of life will be cut down to a minimum.

NOVEL METHOD OF BLEEDING.

Charles Coppinger, F.R.C.S., 114 Upper Merrion st., Dublin. *British Medical Journal*, Sept. 15, 1883.

The patient had been in a state of stupor for twenty-four hours, breathing heavily, but rousing when spoken to, after which she relapsed again. She presented all the symptoms of high arterial tension and an overloaded vascular system; and bleeding seemed clearly indicated. Leeches could not, at once, be obtained, and the lady friends of the patient were horrified at the idea of an operation. Under these circumstances the following plan was adopted, the accomplishment being facilitated by the fact that the patient had been treated, a short time before, for hemicrania, by hypodermic injections of morphia. She was roused up and told that "the needle" was to be inserted into her neck, to which she at once consented. The needle, not of a hypodermic syringe, but of an aspirator, was then introduced into her left jugular vein, which was much distended, and four ounces of blood were withdrawn without difficulty. The result was so satisfactory that, after half an hour, the puncture was repeated, and six ounces drawn off, being the full capacity of the aspirator. The patient recovered, and neither she nor her nervous lady friends in the room had any idea that she had been bled, until the matter was subsequently explained to them.

This method seems one that could be resorted to in many cases, especially where the patient is afraid of an operation, even though slight; and it avoids the display of blood, which is so alarming and distressing to those unaccustomed to the sight.

A NEW METHOD OF TREATING SPRAINS.

Dr. Thomas L. Shearer thus writes in the *Lancet*.

Every one who has had sprains to treat in practice must have been at times annoyed by the slowness of recovery to the injured part. This is not so important in hospital patients, many of whom, enjoying the life, diet, etc., of these institutions, do not object to prelonged treatment; but in the wealthier classes in private practice the surgeon must often hear complaints that the injury is so long in recovery. I have had a considerable number of sprained limbs to treat, and, after employing the usual plans of treatment, was led to adopt a new agent—clay. The clay is simply that used for making bricks, free from gravel, dried, and finely pulverized in a mortar. The powdered clay is mixed with water so as to form a thick and moist consistence. This is spread on muslin to the depth of a quater of an inch, and applied entirely around the part. Over this is placed a rubber roller bandage, just lightly enough to keep the dressing from shifting and to retain the moisture. At the end of twenty-four or thirty-six hours the dressing must be renewed. It may be well to relate a few cases by way of illustration.

Case 1. Mr. T——, aged fifty-eight, was thrown from his carriage, and, in addition to other injuries, received a severe sprain of his ankle, completely incapacitating him from motion of any kind. The part was hard, swollen, intensely painful, and throbbing. The dressing, as above described,

was applied, and in twenty-four hours the pain was almost entirely gone, and the swelling to a great degree had subsided. The dressing was renewed daily, and in eight days the patient was going about attending to his business. The part was free from pain and natural in every respect.

Case 2. Mr. McC——, aged sixty, slipped and sprained his ankle so severely as to confine him to bed. The treatment was the same as that employed in Case 1, and the patient was out and walking in the streets in ten days.

Case 3. Mrs. A——, aged seventy-four, in stepping from her carriage missed her footing, and twisted her left knee violently. In a few hours the part was greatly swollen, hot, throbbing and painful; the least motion of the joint caused excruciating agony. Pressure over the ligament was especially painful. Next day I saw the patient, and applied the clay dressing. The day after the patient was much easier, the swelling rapidly subsiding. The pain was almost *nil*, and movement of the part was not followed by such distress. The lady was walking in her house in ten days after the injury.

Dr. Hewson, of Philadelphia, about ten years ago, introduced earth as a means of treating fibroid tumors of the uterus, and also sprinkled burns with the dry earth, claiming that the tendency to deformity in the latter cases was lessened. However, I am not aware of sprains being previously dressed with clay, and it was thought as well to lay the efficacy of the method before the profession. A number of other cases could be cited, but they would simply be a repetition of those already mentioned. While speaking of clay, it would, perhaps, not be amiss to state that the powdered dried earth sprinkled on the surface of an ulcer, and adhesive straps applied over it, is a capital dressing for cases which are so weak, that even the weakest ointments tend to break down the granulations.

CATHETERS.

A male catheter may be improvised from a piece of wire bent double upon itself, the blunt double end passing readily through the urethral tract to the bladder. The distention of the urethra by the wire will allow the urine to pass.

A female catheter may be made from a short piece of straw, the end being closely wrapped with a piece of thread; or the end of the straw may be dipped into melted sealing-wax. The stem of an ordinary tobacco-pipe is also efficient. Such crude substitutes, if well oiled, are readily introduced. (Levis.)

Catheters may be improvised from hollow flower-stalks and stems, as a dandelion-stem, or from hollow sticks, as elder. Lacking other material, a piece of macaroni may answer for temporary use; but it should not be left long in situ, and must be thoroughly oiled before introduction. A lead-pencil may be soaked in water or steamed, and split at the joint where the two pieces are put together in the process of manufacture; the lead can then be scooped out with a knife, and the two pieces be tied together with fine thread wrapped around them. If the end of this is rounded and the whole well-oiled, a very serviceable catheter may be made. It is not necessary that a catheter should be hollow, for a stick grooved on the outside will answer as well. The grooves may be spiral or longitudinal. A piece of coarse cord, wrapped spirally around a stick or lead-pencil, is a ready means of forming such grooves. A glass tube, the ends of which have been rounded in a flame, will often be available; it is hardly necessary to caution one against the liability of breakage in the urethra. A feather stripped of the feathery portion, and all roughness taken off by singeing, the end being opened and the pith pushed out, will often be available. A rubber tube well oiled, can be used; the sharp corners of the tube may be blunted by holding the tube in a flame for a second or two, or a plug with a shoulder may be fitted to the tube. This hollow plug can be made of lead or wood, and in all cases must be tied into the tube. A rubber catheter of this description, or any catheter for that matter, may often be readily introduced by injecting water through it very gently, so as to open up the canal in advance of the point of the catheter. Even so simple a thing as a paper lamp-lighter may be pressed into the service. This should be made from a strip of stiff writing-paper and tightly rolled spirally. If the strip is covered with paste before rolling, the spiral turns will be tightly held together when the paste is dry. To make sure that the bore is open, the strip may be wound over a string to be withdrawn after winding. If the smaller end of the lighter is dipped into melted sealing-wax, a very fair catheter may be made.

Whatever may be used for a catheter, care should be taken that no portion of it is left in the bladder. Whenever any substance is passed into the urethra for purposes of mechanically relieving existing trouble, the instrument should be freely oiled or greased. Vaseline is the best, if procurable; but, wanting it, lard or oil may be used, or even soap. Oil is injurious to all rubber goods, and will destroy rubber catheters in a short time; but the alternative of using soap as a lubricant is rather harsh on the mucous lining of the urethra. Other things being equal, a given expedient used for a catheter will be more useful the better the lubricant. Even water is better than nothing to facilitate the passage of a catheter.

FOREIGN BODIES IN THE ŒSOPHAGUS.

An ordinary riding-whip, knotted far enough from the end to insure the proper degree of flexibility, may be an efficient expedient in forcing down a body caught in the œsophagus. (Levis.)

A skein of floss silk, or a small skein of worsted doubled, and tied firmly to a string, may be of use in snaring some foreign bodies, and thus extracting them.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL FEBRUARY, 1886.

THE SMALL-POX EPIDEMIC.

At last Montreal is free from small-pox, and, so far as this disease is concerned, she has a clean bill of health. This most desirable end has not been accomplished without a vast amount of work, in which several agencies have played an important part. While we have not failed to state our opinion that, in the early part of the epidemic, the Health Department of the city was not equal to the work, we cannot, now that matters are once more bright, but give our praise to the work it did during the terrible month of October, 1885, and since. Alderman Gray, in the direction of his Board of Health, is deserving of the warmest thanks of every citizen of Montreal. It may be true, perhaps, that in the early history of the epidemic, neither he, and for that matter, others, did not at first realize the possibilities of the future; but in this connection it must be remembered that the chairman of the Board of Health, although elected to that position because of his believed aptitude for its duties, is a gentleman engaged in a business which demanded a large share of his attention. While we had a right to anticipate that its functions would be more scientifically looked after than they had been, we had not the right to ask that his own business interests should suffer. Alderman Gray, however, so soon as it became evident that the scourge was taking a firm foothold among us, realized the position, and, throwing aside all his private interests, devoted himself all but wholly and entirely to the work of stamping out the disease. It was he, we believe, that induced the Government to issue its proclamation, establishing the Central Board of Health, and the wisdom of this action no one now doubts. His re-election to the same position this year is an expression of confidence on the part of his confrères in the City Council, and it is endorsed by those of our citizens whose good opinion is worth having.

In the working out of all these multitudinous details which fall to the lot of the Board of Health, especially after the opening of the Mount Royal Hospitals, the able hand of a noble citizen, Mr. Tremble, was constantly seen. This gentleman, without fee or expected reward, was a volunteer of which our citizens may be proud. The members of the Citizens' Committee on the Board of Health were also useful, and did their part in restoring the good name of Montreal. The Citizens' Committee, also, were useful. It had many excellent members, but one or two cranks at times threatened to spoil some of its work. The good sense of the majority, however, kept them to their proper sphere, and the result proved their wisdom. The immense number of vaccinations performed by their Vaccination Committee was an important factor in arresting its spread. The money they spent was well placed. In hospital work at the Mount Royal Hospitals the noble self-denying labor of both the Roman Catholic and Protestant nurses should never be forgotten. It is beyond all praise. Dr. De Bonald and Dr. Gardner did their duty conscientiously and well—we need not say more concerning them. In the Justices of the Health Court, Montreal was fortunate in having two such fearless and upright men. Their judgments were above suspicion, and exercised an influence which extended far beyond the City of Montreal. The Central Board of Health, brought into existence on the 4th of September, 1885, by Proclamation of the Lieut-Governor, was the focus from which all power emanated. Their rules and regulations —which had and still have the force of law—are perhaps the most comprehensive and severe that have ever been created to stamp out a small-pox epidemic. Their power was well illustrated when, under one of its rules, St. Cunegonde was brought to terms by the erection of barricades at all the streets entering into Montreal. It has still a heavy work on its hand, for small-pox is still epidemic in many parts of the Province. And, lastly, Montreal was more than fortunate in having as its mayor Mr. H. Beaugrand—a man of rare energy and decision of character. His action was ever most opportune, and throughout the whole epidemic he was never once found wanting. The gratitude of every sensible man in the city is his, and as his return for a second period by a large majority, is well assured, we trust a more tranquil and peaceful time is in store for him.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, MARCH, 1886. No. 6.

CONTENTS.

ORIGINAL COMMUNICATIONS.

Clinical Lecture 441
Amputation of the Tongue 444

SOCIETY PROCEEDINGS.

Medico-Chirurgical Society of Montreal 445

PROGRESS OF SCIENCE.

Belladonna—Some of its Therapeutic Uses 454
The Specific Treatment of Diphtheria and Croup 456
Weak Heart 457
Torticollis 458
A Cherry-Pit in the Ear of a Child 459
Treatment of Nightsweats 459
Therapeutic Hints and Approved Formulæ 460
Cascara and Chronic Functional Constipation 460
Deodorized Iodoform 461
Diet for the Sick 462
Gastro-Intestinal Indigestion 462

EDITORIAL.

Austin Flint, M D., LL.D. 462
Local and General 463

Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, December 15th, 1885.

BY FRANCIS W. CAMPBELL, M.D., L.R.C.P. LOND, Dean and Professor of the Theory and Practice of Medicine in Bishop's College Faculty of Medicine.

HYSTERIA.

The patient who presented herself last Thursday the 7th of December, in the out-door room, and who is before us to-day, is suffering from hysteria. This is a purely functional trouble of the nervous system, *i. e.*, she has not any organic disease which, is the cause of her present condition. She is a servant, has been much confined to the house, and her general condition has for some time been getting below par. Her appetite is poor, at least is not what it ought to be, and her temperament is highly nervous; she had a choking sensation, caused by the feeling as if a ball was in her throat. She is very emotional, and the class will remember that when we first saw her it was a matter of some difficulty for her to restrain her tears. I placed her on the following prescription:

℞ Potas. Bromid., ʒ iii.
Tinct. Valerian Amon., ℥ iss.
Liquor Strychnia, ʒ ii.
Aquæ ad., ℥ vi.
A dessert-spoonful three or four times a day.

And the result has been, she informs me, very satisfactory. There has been a decided improvement. The choking sensation has all but disappeared, and she is able to attend better to her work.

Hysteria is characterized by various motor, sensory and intellectual disturbance. It is a disease which is met with in women, in fact may be called a disease of females, although in my practice I have met with several well-marked cases in male adults. It is often met with just at that period of life when the sexual functions are developing, and may continue for a number of years, manifesting itself under the most trivial exciting cause. The hysterical type is said to be inherited. It frequently develops its manifestations in females, at or just previous to the catamenia, when an examination of the ovaries will generally show that they are in a state of congestion, being swollen, hard and tender. At one period *all* hysterical phenomena were attributed to ovarian or uterine irritation, but it is now known that many cases have not this origin. Violent hysterical paroxysms have been known to take place in women where both ovaries and uterus were congenitally absent. The blood of hysterical patients is generally deficient in red corpuscles; a condition of anemia is present, and when this is the case the nervous tissue is very irritable. The symptoms are numerous and varied, the following are among the chief: The patient experiences rapid change of feeling, without any apparent cause; at one moment she is sad and desponding, the next bright and joyous; one minute in tears, the next bursting into fits of uncontrollable laughter; the hands and feet are hot and cold in turn. The patient fears Paralysis, on account of a numbness and tingling felt, generally in the hands and fingers. These generally disappear or are forgotten when the attention is fully occupied. Pain at the heart, palpitation, rapid breathing, a sensation of fulness in the stomach and bowels,

often causing the patient to loosen her corsets. The rising and falling of a ball in the larynx ;this is called the "globus hystericus" or "hysterical ball." It produces a sense of suffocation, and is so real that the patient often places the fingers in the back of the throat in the hope of removing the "ball"; the face gets pale and red by turns. Some cases do not advance beyond this, but others go a step further, when paroxysms of a spasmodic character, both clonic and tonic occur. When a severe attack is about to take place, while many of the symptoms I have given are present, in addition, the jaws are fixed, the face retracted, the teeth grinding, the hands clenched, the limbs drawn up and rigid. Such is a tonic convulsion. The attack may only last a few minutes—it may continue an hour or two. A flood of tears is the first symptoms of subsidence, a large quantity of pale limpid urine is passed, and the patient falls asleep exhausted. Other cases have irregular clonic convulsions, the patient screams, throws her limbs about, or throws herself on the floor, tears at her hair and throat, the abdomen is full of gas and gives out a loud rumbling sound, like distant thunder. This is called Borborygmi. Consciousness is not lost, the eyelids, though closed, are in a constant state of trembling, and no matter how wildly the patient tosses about, they very seldom ever injure themselves. The attack passes off as do the others by subsidence of the paroxysms, the passing of a very large amount of pale urine, followed by deep sleep. The duration of the attack may be a few hours, or only a few minutes. Hysterical patients are very sensitive of sound and of odors; the appetite is perverted, and they have a strong predilection for chalk, slate pencils, sealing-wax; others again for vinegar and pickles. They also suffer from headache, and hyperæsthesia of the scalp. This latter is sometimes so great as to render combing of the hair impossible. Neuralgic pains in the mammæ are common, and they are tender to the touch. Abdominal tenderness is often complained of. The slightest touch is painful to the patient, but if attention be diverted, deep pressure is painless. There is tenderness over the spinous process of a few vertebræ, and pain in the knee is often complained of. A common symptom is paralysis of the bladder, from over-distension, requiring the use of the catheter. Temporary paralysis of muscular groups occur, lasting variable periods, spasmodic flexion of the fingers, hand or fore-arm may occur, so, also, may spasmodic extension of hip, knee and ankle joint. The heart is often weak,there is at times epistaxis, hæmoptyis and hæmatemesis. Amenorrhœa and dysmennorrhœa are common. Great care must be taken not to sympathise with your patient—nothing is more injurious than to do so. It is extraordinary with what ingenuity and perseverance an hysterical patient will attempt deception of her friends and medical attendant. A little care and thought will prevent any error in diagnosis.

Treatment. When the case is well developed, moral and hygienic means are the most useful, change of scene and travel, with a view of constant mental occupation is very beneficial. Early hours and plain food must be insisted on. Exciting novels, must not be read, especially such as appeal to the sexual passions. This is preliminary treatment, when an inherited influence exists. If, in spite of this, the hysterical condition develops, medicines are necessary. Iron must be given, if there is anemia, and the best iron preparations are those which are most readily assimilated, such as the dialysed iron of Wyeth & Son of Philadelphia, the sulphate of iron, reduced iron, or ferri redactum, the carbonate of iron, the ammon. citrate of iron and arseniate of iron. When possible, it is well to give iron in pill form, so as to prevent its acting on the teeth. If it has to be given liquid it should be taken through a quill. Strychnia and phosphorus are useful, they help to build up the tone of the nervous system. If the patient is plethoric a few leeches over the ovaries will be useful, while internally give the bromides, gelsemium and cimicifuga. For the hysterical feeling without convulsions, the ammoniated tincture of Valerian, in 3ss to 3i doses every 4 hours, or the same quantity of Hoffman's anodyne, *i.e.*, Spt. Ether Sulph. Co. In the convulsive form, inhalation of nitrite of amyl or chloroform, dashing cold water over the face, rectal injections of turpentine or tincture of assœfatida, this latter may be given internally or in the form of pill. In very bad cases morphia in ¼ gr. dose may be hypodermically injected. The paralysis should be treated by faradic electricity. Sometimes hysterical subjects are so bad that they become bedridden, *i.e.*, they cannot be induced to leave their bed. I knew a lady who was for years bedridden, from what she termed spinal disease. It was pure hysteria. The house took fire, when she rapidly left her bed, and never returned to it unless for her night's rest. She transmitted the same nervousness to her daughter

who, in a modified degree, followed in her mother's footsteps. It was only by strong moral influence, that she was saved from the development of it to its full extent. For such subjects Dr. Weir Mitchell, of Philadelphia, has devised a plan of treatment. It consists in the combined use of massage, faradizations and forced feeding. Massage consists in friction, kneading and tapping of all the muscles, except those of the face, in passive motions of all the joints, and in muscular motions produced by faradic applications. The frictions are made with either lard or cocoa butter. The diet at first consists of milk only, but additions are constantly made to it till a liberal allowance is given. No exercise is allowed, all movements are made for the patient, in other words, the patient has exercise without voluntary effort. Increase in weight soon takes place, and when the improvement has been decided, voluntary exercise is permitted. The patient must be separated from all her former associates and the sympathetic surroundings of home. The prescribed milk diet begets hunger, which soon takes the place of indifference. Her forced rest in bed induces a desire for movement; this is the result of the monotonous idleness. The moral force of her new surroundings reacts upon her, and before long she is able to step out once more into the world a new woman.

Worms.

The Outdoor Department, so far as my experience goes, has not lately furnished many cases of worms for our consideration. Yet, worms are very common in children. The little fellow before you came to us about two weeks ago, complaining of loss of appetite and symptoms of nervous disturbance. He presented a pale appearance, nose somewhat sharp and pinched, eyes heavy, pupils considerably dilated, and the breath was somewhat heavy. Generally his appearance was what I then called "wormy"—an appearance somewhat difficult to describe, but which I still think is well seen in this young boy, and to which I particularly draw your attention. Carefully impress his features on your memory, and it may prove useful to you at some other time. Believing, then, that he suffered from worms, I ordered him 3 powders of santonine of 3 grs. each, which were given, as I usually direct it to be given, *i.e.*, one night, morning and night, to be followed next morning by either castor oil or senna tea. I generally prefer the latter, because it is administered with greater ease. Do not say anything about giving the child medicine, but place before it at its breakfast a cup of senna tea, colored with milk and well sweetened. Most children are fond of tea, and they will readily drink some of it before recognizing that there is something wrong. Enquire what is the matter with the tea, suggest that it is too strong, and add more milk and sugar. The child will take another drink, but soon recognizing that the improvement supposed to follow the additional milk and sugar has not come up to its expectation will refuse to take more. Acquiesce in the child's decision, for there is every probability that enough has been taken to act well on the bowels. The result in the case before us was the passage of two worms, belonging to the class of the Nemotoda, or round worms, a specimen I should judge from the description the mother gives, of the Ascari Lumbricoides, the most common worm which infects the intestinal canal of the human subject. Although only two have been got away I am satisfied there are more behind, and after a brief rest we will again endeavor to get rid of them. The riddance of those two worms has been beneficial to the patient, who is slowly improving. A week ago I placed him on the syr. ferri. iodidi, with a view of improving the condition of his blood. I have not the time to enter even briefly into the subject of the various worms we as physicians will be called upon to treat. But a word or two regarding the most common—the Ascari Lumbricoides.

The ova of the worm is believed to enter the body through drinking water. There may be only one or two, as in this case, or they may reach thousands. When very numerous, they are grouped in bundles and at times occlude the bowel. Their habitat is the small intestine, and they are met with mostly in the autumn. The worm is cylindrical in shape, reddish-brown or brownish-yellow in color, tapers at both ends. Females when passed are often found to be loaded with young. When they are numerous the following symptoms may be present, in whole or in part: Colicky pains about umbilicus, tumefaction of the abdomen, capricious appetite, nausea, at times vomiting, diarrhœa, whey like urine, itching of the nose and anus, blue mark under the eye, dilated and at times unequal pupils, irregularity of pulse, attacks of a choreic and hysterical character, night turns, restless sleeping, constantly tossing about, grinding of the teeth. These worms sometimes crawl up into the pharynx and producing a feeling of tickling,

at times of nausea, the fingers are passed backward, the worm seized and withdrawn. They also find their way into the Eustachian tube, the nose and the larnyx, in the latter case death ensues rapidly from suffocation.

Santonine is the common remedy; calomel has vermifuge properties even alone, but it is a good addition to santonine. Chenopodium or worm seed is good. It is usually given in the form of oil. It is seldom however used on account of its disagreeable odor and taste. The fluid ext. of spigelia, better known as pink root, is a very excellent vermifuge. It should be given in dose of one to four drachms.

AMPUTATION OF THE TONGUE.

BY THE INTRA BUCCAL METHOD BY MEANS OF THE GALVANIC CAUTERY.

By Dr. L. Girerd.

Surgeon to the Interoceanic Canal Company at Panama S. A. (Translated for The Record by Dr. Wolfred Nelson, late of Panama.)

Patient, a middle-aged man, well-nourished.

Case.—On the edge of the tongue, near its root, on the right side, on a level with the last molar, is a fungoid ulcer, which rests on a hard and tumified base. It is surrounded by a number of granulations. Fortunately, the glands in the vicinity are not involved.

Some ten months ago the patient experienced a burning sensation on that part of the tongue while smoking, a small pimple followed, accompanied with occasional lancinating pains.

Preliminary tracheotomy was performed seventeen days before operation. He took cold and some tracheo-bronchitis followed, from which the patient had not entirely recovered at the time of the operation. The operation took place on the 9th of April, the galvanic cautery being used. The patient came under the chloroform readily, then suddenly stopped breathing, instantly. I sprang on the operating table, seized my patient firmly by the legs, and hung him head downwards, whilst Dr. Vernial practised artificial respiration, (I was assisted by Drs. Vernial, Meurisse and Nelson.) The syncope yielded readily to the above treatment, when I proceeded with the operation. Bunsen's modified cells were used, twenty small elements were brought together in series of four, the five series being connected. The patient's mouth was kept open by Charriere's *ouvre bouche.* The lips and gums were protected by pledgets of wet cloth secured by elevators. When all was ready a platinum wire, with a diameter of seven-tenths of a millimetre, was passed through the tongue by means of Reverdin's half-curved needle, passing it obliquely before and behind the sore, from right to left, then from below upward; thus the needle entered on a level with the root of the tongue near the floor of the mouth, in the posterior third of the right side of the organ. The ends of the platinum wires were connected with the resphones. The wire played on the middle part of the dorsal surface of the organ. The current was turned on; the loop, under delicate traction, cut its way out. The section was made slowly, and at times when the current was too intense, as shown by a greater incandescence, it was modified. A second wire was passed horizontally towards the base of the organ, using the same needle, commencing at the level of the first incision, and coming out behind the hardened growth. Under gentle traction, the second section was completed. The third and last section was destined to sever the growth from the base of the tongue on the floor, in its mouth being its only remaining attachment. This section was a transverse one and completed the removal of the diseased parts.

The sections were as clean cut as if done by a bistoury. There was no hæmorrhage. The eschar was slight and almost imperceptible.

Following the operation a careful examination of the tongue was made, to make certain that the whole zone of disease had been removed. After treatment: ice in the mouth and borax lotion.

Remarks.—If we wish to avoid primary and secondary hæmorrhages while making the regular sections, it is necessary to proceed slowly and with the greatest caution.

The patient's temperature on the evening of the operation was $37^{\circ}4$. C. He was feeling very well. He was discharged from the Canal Hospital on the tenth day. Following the operation there was some difficulty in articulating, later the man spoke fairly well. The section removed was somewhat riangular in shape and made a large hole in the ttongue.

(*Translator's Note.*) I saw the man some months after the operation, when he was in excellent health. He was delighted with the results, and loud in his praises of Dr. Girerd's skill. The impediment to speech was very slight.

W. N.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Dec. 18, 1885.

T. G. RODDICK, M. D., PRESIDENT, IN THE CHAIR.

Unusually good convalescence after Ovariotomy.—Dr. TRENHOLME related the history of the last two cases operated upon for ovarian dropsy. In one case the temperature reached $101\frac{3}{5}$° ten hours after the operation, but the next morning it was normal. The following afternoon (26 hours after operation) it was 99°, but in the evening it was normal, and remained so afterward. After the first day the pulse also was normal. There were no signs of shock or after suffering of a severe character. The tumor weighed 34 lbs., and the patient was convalescent after the 18th day. In fact, manifestly gained in flesh before the end of the first week. The second case was even more remarkable, as the tumor weighed 55 lbs. The temperature reached 100° ten hours after the operation, the next morning it was normal, and, together with the pulse, remained normal afterwards. The patient was up for her meals the 11th day, and going about the house after the 14th. There were no symptoms of shock, no suffering, and not even a sign of tympanitis. The remarkable results obtained in these cases were due, Dr. T. believed, to the smallness of the abdominal incision. In neither case was it more than three inches in length, and in neither case were the intestines exposed to the air—in fact, in one case not even seen. The second point was the mode of securing the pedicle; as in all his operations, Dr. T. employed No. 20 shoemaker's white thread, and ligated the pedicle in small segments. The high temperature of the room, the atmosphere being saturated with vapor of water slightly impregnated with carbolic acid, was believed to have contributed to these favorable results.

Dr. SMITH read a lengthy paper on "*The A. C. E. Mixture, the best Anæsthetic in Obstetrical Practice.*" The conclusions arrived at were as follows—1st A. C. E. is an effective general anæsthetic, producing as deep insensibility as chloroform. 2nd, Its action is rather more rapid than chloroform, but to develop its effects more of it is required, the proportion being about as 6 is to 4. 3rd. It produces a less prolonged, second degree of narcotism than other anæsthetics. 4th, When its effects are fully developed the narcotism is very prolonged, and is reproduced with great ease. 5th, Its influence on the nervous centres is more uniform, and it creates little, if any, disturbance or break of action between the respiratory and circulatory functions. 6th, The final escape from the organism is rapid, so that the symptoms of recovery are sudden. 7th, In some cases, but very rarely, it produces vomiting. 8th, When it kills, it destroys by equally paralyzing the respiratory and circulatory mechanism.

Dr. KENNEDY had not seen the A. C. E. mixture used often, and in these few cases he was not favorably impressed towards it. He thought it would evaporate irregularly, the ether being more volatile, would go off first, and leave the chloroform and alchol behind. He liked chloroform for midwifery practice and ether for surgical cases.

Dr. HY. HOWARD said he had used chloroform upon himself continuously for 48 hours for a severe attack of renal colic. He had also taken ether. He had no fear of either of them.

Dr. STEWART had never used the A. C. E. mixture, and believed the little alcohol in it could have no value as stimulus. Bichloride of Methyline had caused a good many deaths in the past ten years. The danger with chloroform did not arise from large doses. Statistics prove that often a small quantity has produced fatal results.

Drs. MCCONNELL, Mignault, Armstrong and Trenholme were well satisfied with chloroform for obstetrics and ether in most other cases.

Dr. BROWN said he had never seen post-partum hemorrhage follow the use of choloroform. He gave a few drops on a cone made with a towel or handkerchief, and only when the pain was on, giving a little more just as the head was passing the vulva. He found less danger from tearing if the head be pushed forwards and delivered with the thumb or finger in the rectum in the interval between the pains. He would use ether in placenta prævia, where there had been much loss of blood. Dr. Fordyce Barker advocates the use of chloroform in nearly all midwifery cases. Dr. Kingman of Boston could only find seven deaths recorded from chloroform in midwifery practice, and none from ether; still, we must remember how many more times chloroform is used than ether in these cases.

Dr. BULLER thought the A. C. E. mixture might be very useful. He believed with many that chloro-

form was better suited to young children and very old persons. He had used Bichloride of Methyline a few thousand times in the Royal Ophthalmic Hospital at Moorfields, and had seen deaths follow its use. He did not like it.

The PRESIDENT said he had taken a deep interest in anæsthetics, but had not seen the A. C. E. mixture used. In his surgery practice he now uses ether exclusively. During six years at the hospital that he had seen chloroform administered, they had no deaths, but he had seen some very narrow escapes. They used to give a draught of spirits before giving chloroform. With ether, one may do without an assistant; this is not justifiable with chloroform, except, perhaps, in midwifery practice. He thought ether was safer at all ages. He has seen dangerous symptoms follow chloroform, even in young children. Of course if he had to operate upon an old man with atheromatous arteries he might use chloroform, as the struggling which often follows ether would be dangerous. He considered chloroform administration in the dentist's chair very dangerous, the upright position causing the patient to be more liable to fatal syncope.

Dr. SMITH, while expressing his gratitude for the friendly criticism which his paper had elicited stated that had not, so far, heard anything to affect the good opinion he entertained for the A. C. E. mixture.

Dr. STEWART having remarked that Dr. Smith concluded that the A. C. E. mixture was safer than chloroform, because it only contained one-third part of chloroform, but that it was often the case that fatal cases of chloroformization occurred when only a very small quantity of the drug had been used, and therefore that the small quantity of chloroform in the A. C. E. mixture was no argument in its favor.

Dr. SMITH replied that it was precisely to meet such an objection as that, that he had devoted several pages of his paper to show that those cases of death were not due to the exceedingly small quantity of the anæsthetic, but to the condition of the patient's circulatory and nervous system at the time. It was a well-known proverb that by being united in marriage we halved our sorrows and doubled our joys, and so by uniting chloroform and ether we doubled the advantages and halved the dangers of each. Certainly chloroform was safer in midwifery cases than in any other, because the woman was recumbent, and, moreover, she was making expulsive efforts, which guarantee a plentiful supply of blood to the brain. But it could only be entrusted to a medical man; and where there was only one, and he had the forceps to handle, chloroform was admittedly a dangerous drug Besides, it was not a drug that could be used very well during the first stage of labor, during which, however, some women suffer more than in the second stage. Alcohol killed by the head or by coma; chloroform killed by the heart or by syncope; ether killed by the lungs or by apnœa; but by adding the three together, and then only giving one-third the quantity, we obtained an average effect sufficient to produce anæsthesia, but remaining very far short of death.

Several of the speakers having called in question the usefulness of adding alcohol.

Dr. SMITH replied that alcohol was a very good anæsthetic as well as stimulant, and would have been used for that purpose in the form of vapor long ago were it not for the defect that it irritates the bronchial tubes when administered alone, but not so when mixed with chloroform and ether, the A. C. E. mixture being just as pleasant as chloroform to inhale. In conclusion, Dr. Smith said that he had so far only had occasion to use it in a hundred and ten cases, but that he would continue to employ it as long as he lived, and that perhaps, in ten or twenty years, he would have the inference of a thousand instead of a hundred cases. He did not pretend to be the discoverer of this combination, nor even to be the first person in America to use it; in fact, in reading the current literature of the day he frequently came across reference to this anæsthetic. Indeed, for all he knew to the contrary, there might be a hundred very able men who constantly used it, and yet who had not had the time, nor felt it their duty, to lay it before their professional brethren.

Stated Meeting, January 5th, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Rapidly Growing Ovarian Tumor.—Dr. Trenholme showed a large semi-solid ovarian tumor which he had removed from a woman some days before. The patient, when she consulted him, was unaware that she had a tumor, but consulted him for severe abdominal pain, which had lasted some three weeks. She had only noticed a swelling for the last six weeks. Latterly, the tumor had grown very rapidly. It was removed without great diffi-

culty, though the adhesions were numerous, and the operation was complicated and prolongued by the bursting of a cyst. The pedicle was broad, and as is his custom, he ligated it in sections with shoemaker's thread. The patient's temperature rose to 101° the day after operation, but soon fell to normal, and remained there.

Dr. SHEPHERD mentioned that a short time ago he had operated in a case of ovarian tumor (in a childless married woman aged 29), with a history of only eight weeks' growth. The patient was seen by Dr. R. P. Howard a month before the operation, and at that time the tumor was of small size; it grew very rapidly, and in three weeks was quite large. At the time of operation, it was doubtful whether this rapid increase was not due to ascites. However, it proved to be a single ovarian cyst, with a solid base, containing 20 pints of thick fluid and weighing some five pounds. The patient did well, and was able to return to her home in four weeks.

Undeveloped Bones in an Idiot.—Dr. R. L. MacDonell showed the bones of the lower extremity of an idiot which had been sent to the dissecting-room of McGill University from one of the institutions of the city. The individual was said to be 20 years of age, and had never spoken or walked. The bones, although of good length, were remarkably small, the femur not being thicker than an ordinary sized finger. The hip-joints were ankylosed in the flexed position, and there was contraction of the knees. The muscles of the lower extremities were strings of fibrous tissue with a little muscular tissue about them. The head, although somewhat microcephalic, was of good shape. In both femurs there was a well-developed third trochanter.

Dr. Hy. HOWARD said such cases were common in all lunatic asylums.

Hemorrhage into the Pons Varolii.—Dr. R. L. MacDonnell read the history of a case of hemorrhage into the pons Varolii. An old man, aged 62, was admitted into the General Hospital on 31st July, 1885. He had been picked up by the police in the streets, and was in a semi-unconscious condition, unable to communicate anything whatever regarding his history. He was a tall, thin man, very anæmic, with wasted and flabby muscles. His expression was dull and listless, and though he could utter words when spoken to, he was by no means rational. The pupils were equal, but the left was more sluggish than the right. There was slight paresis of the left side of the face, and the right side of the body was weaker than the left. There was increase of the superficial reflexes, but normal patellar reflex. The urine and fæces passed in bed; he was always in a semi-comatose condition; pulse 90, and feeble. On the 3rd of August, his breathing was stertorous, the paresis of the left side of the face more marked, and coma more profound. Next day the coma was complete, pupils contracted and unequal; large, moist râles heard at the basis of both lungs; toward evening he died comatose. The brain alone was examined after death, when a fresh clot was found in the pons Varolii, occupying the posterior or lower part, and situated rather more to the left than the right side. Dr. MacDonnell remarked that the central situation of the clot was shown by the equality of the paralysis on either side, and the greater weakness of the right side being accounted for by the position of the clot. It was a case of alternate hemiplegia, the left side of the face being paralyzed, though to a slight degree. This is characteristic of pontine hemiplegia, especially when the lower half of the pons is injured, though usually the fifth and sixth nerves are also involved. There was nothing distinctive in the condition of the pupils, which were not, as usually described, contracted, but merely sluggish in their reaction to light. In hemorrhage into the pons, one of two opposite condition is usually observed: contraction of the pupils when the lesion is sudden and situated in the upper part of the pons, causing irritation of the nuclei of the third nerve; and dilatation from complete invasion and destruction of these nuclei.

Dr. Hy. HOWARD asked if, at the post-mortem, the ruptured vessel had been found, as it was most important to know exactly the source of the hemorrhage.

Dr. WILKINS related a case of very extensive hemorrhage into the pons, where the patient lived for eight days.

Dr. STEWART asked if the whole of the left facial was effected, or only the respiratory branches?

Dr. MACDONNELL, in reply, stated that the ruptured vessel had not been found, and that the whole of the facial was paretic.

Cerebral Syphilis.—Dr. Geo. Ross reported a case of supposed cerebral syphilis which had occurred in his wards in the General Hospital since his paper on that subject was read before the Society. The patient died a few days after admis-

sion, and a post-mortem was obtained. He came into the hospital complaining of very severe pain in the head and vomiting. In a day or two he was quite maniacal, and then gradually became comatose. He died comatose five days after admission. At the post-mortem Dr. Wyatt Johnstone found at the base of the brain a single small flake of recent lymph, lying on and attached to the inferior surface of the facial nerve in the right side, near its origin. On slitting up the vessels at the base, this exudation was seen to correspond to a small lateral branch of the basilar artery, where it crossed the nerve. The thrombus extended in this vessel as far as its origin from the basilar, at which point a small roughened, reddish patch existed in the intima, and its wall was thickened, but no thrombus present. The right posterior cerebral artery presented a thickened wall and narrow lumen, and was thrombosed in its whole course; other cerebral vessels normal. On dissecting the brain, no local degenerative changes were recognized anywhere. Dr. Ross remarked that it was singular that such apparently simple lesions should produce such grave symptoms. He had expected to find much more marked pathological changes in the brain.

Erysipelas in Infants treated with Zinc Paste.—Dr. A. D. BLACKADER read a short paper entitled: "Notes on some cases of Erysipelas in the Infant, with a plea for the use of white zinc paint in its local treatment." Brief reports of the cases were given; the last two of which had been treated by the application of white zinc paint over all the erysipelatous surface, in the manner recommended by Mr. Barwell with white lead. The same advantages were claimed for the zinc as had been for the lead, without danger of absorption of any poison which, in infants, was perhaps to be feared with the latter. These were immediate relief to pain and restlessness, followed rapidly, as a rule, by subsidence of pyrexia and arrest of the disease. The fact that erysipelas was a constitutional and not merely a local disease was not overlooked; but it was contended that if by these local measures we moderate and assuage the local inflammation, we, at the same time, control at least some of the factors in the systemic disorder. Special advantages were claimed for it in infants. It is easily applied, drying quickly, and forming a complete dressing by itself, which cannot be soiled by the secretions, nor easily rubbed off by the restlessness of the infant. If desired, some disinfectant may be added. Soap and warm water readily remove it after the attack is over.

Dr. HINGSTON said that he had had himself repeated attacks of erysipelas of the face. He foundt nothing so comforting as frequent dusting with a puff of flour. He believed that when the system was in ill-health the disease spread; if not, that it would not do so.

Dr. TRENHOLME said he had never seen an infan die of erysipelas. He employs a paint of elderberry tea thickened with calcined magnesia.

Dr. Hy. HOWARD said that last winter there were between fifty and sixty cases of erysipelas in the Longue Point Asylum. All were treated by painting with a weak solution of iodine, and all recoverd.

Dr. SMITH said he had seen marked effects produced by one grain doses of quinine given every three hours.

The PRESIDENT said that a favorite prescription for cutaneous erysipelas with the late Dr. Fraser was the oxide of lead and glycerine. He himself uses a lotion of lead and opium, usually warm, but sometimes cold. He believed that great benefit followed the internal use of the tincture of iron in large doses. Patients have a tolerance for it. His usual dose for an adult is 40 minims of the tincture with 5 or 10 of chloric ether every four hours.

Extensive Posterior Cervical Laceration of Os Uteri.—Dr. ALLOWAY related the following case, and illustrated by means of diagrams an extensive posterior laceration of the cervix uteri of long standing, and also demonstrated the operation performed for its cure:—

On the 17th of June last he was requested to see a lady stated to be in a dying condition. He found the patient in a hysterical fit lying on her back in bed, making most exaggerated respiratory efforts —"gasping for breath,"—pulse and temperature normal, but seemed unconscious of his presence. Gave her a hypodermic injection of morphia, and assured her friends that she would not die. At the morning visit next day he obtained the following history: She was 48 years old; had given birth to eight full-term children; one miscarriage at third month about ten years ago; oldest child 25 years of age, youngest 14. She stated she had not been able to do her house-work for some years past. She suffers from intense pain in the back, limbs and head. Has constant irritation of bladder. States that when young she was an exceptionally strong and robust woman, but for some years has been gradually losing flesh. She takes "nervous fits or spells" somewhat like the one in which she was found the day previous. These spells come

upon her without warning, and have been increasing in frequency of late years. Her attendants and friends become greatly alarmed during the attacks, which gives her the appearance of being in a dying condition. She has been treated "for heart disease," liver complaint,' epilepsy, passing of gall-stones, ' ulceration of the womb,' and a host of other maladies, without benefit. She suffers from intolerable attacks of indigestion, reflex pains in almost every part of her body, particularly her head, back and sides. She spends nearly all her time in bed, and carries a mixture of bromide and another of laudanum to make her condition tolerable. Her menstrual function is still active, but irregular; the flow has always been until the last year, very excessive in quantity, and accompanied with pain. On vaginal examination, the pelvic peritoneum and parametric cellular tissue are found quite free from callosities or other evidences of past inflammation. The uterus is freely moveable, and all pelvic parts painless to the touch. The vaginal walls are normal: the uterus is acutely anteflexed. If the perineum be now well-retracted by Sims' speculum, a very odd-looking, large tongue-like body is seen hanging down two inches and a half into the vagina from the vault above. In searching for the external os, none can be found, but high up on the posterior surface of this cervix-like body, about half an inch from the vaginal vault, the sound suddenly passes into an opening and disappears forwards to the depth of about two and a half inches. On carefully examining this peculiar cervix, the anterior surface appears to be of the normal squamous epithelium of the portio-vaginalis exterior, while the posterior surface has the microscopic appearance of the gland tissue lining the cervical canal. The case now appeared to be an extensive posterior laceration of very long standing. Hypertrophy had taken place from the advanced state of cystic degeneration and other chronic changes consequent upon constant and long-continued irritation to which the exposed gland tissue had been subjected. The operation for the cure of the lesion consisted in making a long horse-shoe shaped denudation three-eighths of an inch wide and very deep, so as to excise as much cicatricial and cystic tissue as possible, and then drawing the edges together by six wire sutures, rolling the denuded edges of the cervix inwards upon its longitudinal axis. In this way the cervix was reformed back to its normal condition and shape, the external os being formed at the apex of the body of the last suture. Union was complete throughout; the sutures were removed on the tenth day. The convalescence was slightly protracted from debility, but the patient is now in perfect health, and takes a great deal of exercise. She is free from pain, dyspepsia, and "nervous spell." She is no longer troubled with her heart or liver, *and has not passed any more "gall stones."* The flow has returned two or three times since operation, but when last heard from she stated that seven weeks had elapsed since her last period; probably the menopause had set in.

Dr. ALLOWAY drew attention to the extreme rarity of this lesion. Emmet states that of 164 operations, only 4 were for posterior laceration. Goodell, in 113 successful cases, records no posterior laceration; and in no other reliable authority can he find reference to this rare lesion. Emmet supposes that when it does occur it heals spontaneously, but that it often causes parametric inflamnation, with cicatricial bands and retroflexion resulting.

Salivary Calculus.—Dr. Hingston exhibited a salivary calculus which had ulcerated its way out of the sublingual duct. The patient had been sent to him to be operated on for supposed malignant disease. The parts about the floor of the mouth were greatly inflamed. This condition had lasted for months.

Dr. JAS. BELL said that some time ago he had removed a similar calculus from Wharton's duct. The patient had been sent to him from the country o be treated for cancer in the mouth.

Dr. SMITH mentioned having removed last year a phosphatic calculus from the tonsil 1¼ inch long.

Stated Meeting January 22nd, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Pathological Specimens.—Dr. WM. GARDNER exhibited the following specimens: 1. *A Fibrous Polypus of the size of an orange*, removed from a woman aged 48. The growth hung in the vagina, and was attached along the whole length of the posterior walls of the uterus. The patient was blanched to translucency by hemorrhage, which had lasted almost constantly for five years. She made a good recovery. 2. *Two diseased Ovaries* slightly enlarged and cystic, being the second ovaries respectively from two cases of ovariotomy —the tumor in one case being a unilocular ovarian cyst; the other the ordinary multilocular cys-

toma. In each case the uterus was enlarged and retroverted. Menorrhagia had in both been a prominent symptom. In such cases, where the second ovary is diseased, the question arises as to what should be the proper treatment when a part of the ovary seems healthy. Schroder has recently published reports of a number of cases in which, instead of complete removal, he has excised the diseased tissue by a wedge-shaped incision and brought together the cut surfaces by sutures. The object in such cases is to permit, if possible, subsequent conception. Dr. Gardner was not aware, however, of conception having occurred under such circumstances. Doubtless, however, after ovariotomy, the second ovary has often been unnecessarily removed, as slight enlargement and a cystic condition do not necessarily imply a condition which shall develop into an ovarian tumor requiring the ordinary operation. The responsibility on the part of the surgeon in dealing with such conditions appears to assume a new aspect in the light of Schroder's experience.

The PRESIDENT said that one objection to a woman becoming pregnant after this operation was that sometimes the abdominal walls give where the incision had been. He had seen this occur once, and produce hernia of the pregnant uterus.

Dr. ALLOWAY said he had attended this woman in her confinement, and had great difficulty in keeping the womb in proper position; it came through the abdominal walls and stretched the integument greatly. She has to wear a pad constantly to keep the abdominal organs from coming through.

Dr. GEO. ROSS said that the first woman upon whom he had performed ovariotomy was told by some of her friends that she would be barren. In twelve months' time she became pregnant, and although the case was one of breech presentation, and although the wound could not heal by primary union, a clamp having been used, still she had no trouble in her labor.

Dr. SHEPHERD said that if the wound healed by granulations, it ought to be all the better.

Cerebellar Disease.—Dr. WILKINS read a paper on "Cases of Cerebellar Disease."

Dr. STEWART asked Dr. Wilkins what were his reasons for considering the second case to be cerebellar and not cerebral; and why hemorrhage?

Dr. WILKINS, in reply, stated that the sudden nature of the death and the symptoms immediately preceding it pointed conclusively, he thought, to interference with the respiratory centre in the medulla. The state of perfect health up to, at the most, three days preceding death, and the sudden onset of the symptoms, pointed to hemorrhage. Had this hemorrhage been into the cerebrum, there would have been other symptoms present, according to the region affected; if into the anterior portion, there would most likely be some psychical symptoms; if into the motor ava, some motor phenomena would be expected to be present; if into the posterior portion, there would probably be some sensory symptoms. Further, persistent vomiting is more frequently present in cerebellar lesions, or lesions in its immediate vicinity.

Dr. GODFREY asked if any of the members had bled for cerebral hemorrhage. He had once done so, with favorable results. The diagnosis was verified by an autopsy made a few months later, the man having been killed by falling off the roof of a house.

Dr. Hy. HOWARD said he had bled for everything. Years ago he had bled as many as forty persons in a morning. The last time he had used his lancet was seventeen years ago, on a man who had an attack of apoplexy. He got well, but had right-sided paralysis for the rest of his days—ten years.

Stated Meeting, Feb. 5, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

PATHOLOGICAL SPECIMENS.

Two Cases of Tait's Operation.—Dr. Trenholme exhibited two pairs of ovaries and tubes. The ovaries were all enlarged and diseased. In the first case, one pair were removed from a woman aged 23 years, who, since she began to menstruate, had dysmenorrhœa. Some years ago her menses were stopped by a cold bath, and each month since then she has suffered from epileptic attacks at this period. In spite of bromide of potassium, etc, these attacks were getting worse. An examination revealed enlarged ovaries. The operation for their removal was the most difficult he had had. There was an enormous amount of adipose tissue in the abdominal walls, and the recto-muscles were very tense. The right tube was free, and disposed of. The left tube looked at first like a multiple or lobulated ovary from old inflammatory constructions. This tube and ovary were bound down by aphesions all around, and covered over by the adherent omentum. After the operation, the patient had a

severe attack of peritonitis. This was treated by hot fomentations, large doses of opium, and injections of linseed tea. She complained of intense thirst, and as she appeared to be almost dying, she was allowed cold water *ad libitum*. The wound, which was nicely closed, was torn open on the third day to allow vent to some exudation. No drainage was used. The patient recovered, and has had no convulsions since. The ovaries were about the size of bantam's eggs, and cystic.

In the other case the appendages were removed from a woman who had suffered ever since she began to menstruate, 14 years ago. Was married ten years, and had one child. She has suffered from almost continual pain aggravated each month. Pain began one week before her period, and continued for a week after, leaving her only five days free. On examination, the uterus was found four inches deep and the ovaries enlarged. The right ovary had a projection like a teat on it. The operation was performed a week ago, and the patient is doing well.

Intra-uterine Myoma.—Dr. William Gardner exhibited the specimen and related the case. Patient, aged 32, was sent to him by Dr. R. T. E. McDonald of Sutton, October 15th, 1885. She had been married 13 years, and had had one child eight years after marriage. She suffered from profuse and painful menstruation at intervals of three weeks. An examination revealed the cause. Removal of the appendages was thought of, but ergot and astringents at the period was tried. She returned three months later with a history of increased hemorrhage. She now was extruding shreds of the fœtid tumor, probably from the action of the ergot. She also had had chills. It was decided to at once remove the myoma. The cervix was first incised with the thermo-cautery, and by means of a pair of scissors and the serrated scoop the whole was removed. A double drainage-tube was then inserted, and sutured to the cervix. Irrigation of weak carbolic solution was used every two hours. Twenty-four hours after the operation the temperature rose to 102° ; irrigation was now constantly used till the temperature fell. Some days after, the suture sloughed away and the tubes came out, causing the temperature to again rise. After this a single tube with a cross piece at the end was used, thus making it self-retaining. Patient made a good recovery. Dr. Gardner laid great stress upon the necessity of frequent irrigation in these cases. Mr. Tait used to lose 5.0 per cent. of these cases, and now his rule is to remove the appendages. He once had to operate hurriedly at night to relieve alarming symptoms caused by the os being plugged with an extruding and sloughing myoma. The patient did well.

Dr. STEWART asked what caused the tumor to slough.

Dr. GARDNER said that no doubt it was due to its being rapidly starved by the effect of the ergot on the uterus.

The PRESIDENT said he could testify to the necessity of free irrigation in these cases. He had charge, during a temporary absence of Dr. Gardner from the city, of two of these case of his, and noticed that if by any accident the tubes came out, the temperature went up.

Dr. TRENHOLME related a case of post-partum hemorrhage occurring in a patient of his. On introducing his hand, he found a tumor about the size of an orange. By the aid of ergot and gallic acid the bleeding was arrested, but when three months pregnant, she lost about a cupful of pus. A week later she aborted, and now no tumor could be felt. She has had two or three children since. He had removed uterine myomata successfully without the use of drainage-tubes, but now believed they should always be used.

Salivary Calculus from Steno's Duct.—Dr. A. L. Smith exhibited the specimen removed by him from inside the cheek. After its removal a thin inspissated fold came away.

"Weid" or Ephemeral Fever.—Dr. Kennedy read a paper on this subject. He had met with several severe forms of weid whilst in charge of the obstetrical department of the Western Hospital. He looks upon weid as being more than an exaggerated milk fever, and something entirely apart from puerperal fever. Dr. Kennedy defines weid as a specific ephemeral fever occurring in women of nervous temperaments during the earlier periods of lactation, commencing by severe chill and ending in profuse diaphoresis, such attacks seldom exceeding 24 or 36 hours. As one diagnostic sign, the chill invariably commences in the back, between the shoulders—patients will often indicate the exact spot,—and from there it rapidly extends over the entire body. Older authorities gave this subject some importance, but modern authors consigned it to oblivion as a "legend no longer to be believed in." Our improved treatment of lying-in patients gives fewer opportunities to observe such cases. The different views as to its

causation were given. Dr. Kennedy did not believe in its being of septicæmic origin, nor of its being merely from distended breasts, but analagous to the rigor and fever occurring after an amputation or passage of a catheter. The after-stages, especially the profuse diaphoresis, indicate also deep impressions made upon the vaso-motor centres. A report of a typical case was read.

Dr. CAMPBELL said it was a long time since he had seen a case of weid, but had many cases years ago. He thought that women were better housed and nursed now-a-days. He believed it was usually induced by a sudden chilling of the body, and was easily diagnosed.

Dr. SHEPHERD looked upon this condition as simply inflammation from retained secretion, similar to what is seen after amputation, if the secretion is pent up.

Dr. SMITH said he did not like the names ephemeral fever or weid; he thought milk fever better. He tries to avoid this trouble by putting the infant to the breast soon after delivery.

Dr. CAMPBELL insisted on the infant being kept from the mother till there were signs of milk in the breasts.

Dr. GARDNER said that some German authors call the disease known as weid late puerperal fever. It is due to a variety of causes. Often it is seen from the 7th to the 14th day, from cold, gastric disturbance, or nervous influence, and frequently it is due to septic poison, auto-infection, caused by the breaking down of clot in a sinus or from abrasion of the genital tract. He said that putting the child to the breast early powerfully favored involution of the uterus.

The PRESIDENT said that the septic poison might not come from the genital tract at all, but be from a minute quantity of pus retained in the breast gland. He had seen death follow septicæmia caused by a drop of pus under a corn on the foot.

Stated Meeting, February 19, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Uterine Fibroid.—Dr. TRENHOLME exhibited a large uterine fibroid which he had removed the previous week from a woman aged 33. Patient, who was married and had borne children, had suffered from symptoms of fibroid for some sixteen years, and as the hemorrhages were becoming more severe, had requested that an operation should be performed. Dr. Trenholme consented, and performed the operation. The tumor was encircled by a wire écraseur one inch above the os uteri and removed; there was considerable hemorrhage, which was difficult to control. The patient never rallied from the operation, but died seven hours after from shock.

Sarcoma of Spleen in a Dog.—Dr. W. JOHNSTON exhibited a specimen of angeio-sarcoma removed from a dog. The tumor weighed 4 lbs., and was continuous with the upper end of the spleen substance. The dog suffered from abdominal dropsy, for which he was tapped, and died of peritonitis a few days subsequently.

Large Urinary Calculus.—The PRESIDENT presented a large uric acid calculus which he had recently removed from a man aged 69, by the lateral operation. The stone weighed 3¼ ounces. The patient had suffered from symptoms of stone for five years, and had been frequently sounded without result. The man recovered from the operation without a bad symptom.

Dr. HINGSTON said he took exception to Sir Henry Thompson's statement that if a stone be over 3 ozs. weight it must lacerate the neck of the bladder. The supra-pubic operation, which appears to be much simpler than the lateral method, had not as yet been performed in Lower Canada. He preferred the lateral operation.

Dr. SHEPHERD quoted a case where a German surgeon had attempted the supra-pubic operation, but finding the peritoneum came down abnormally low he sewed up the wound, performed the lateral operation, and the man did well. However, he believed that the supra pubic operation was the operation of the future for large hard stones. It had been practised with brilliant success by the leading surgeons of France, Germany and America, and now was being adopted by the most conservative of English surgeons.

Dermoid Cyst.—Dr. Wm. GARDNER presented two specimens, and briefly narrated the case:—

Case I.—*Dermoid cyst containing a bunch of hair, two well-formed incisor teeth, and one bicuspid tooth attached to a piece of bone, also a fourth tooth in another part of the cyst wall.*—The fluid contents contained a large quantity of fat, and on cooling looked like drippings of meat. The other ovary was an aggregation of cysts, and was also removed. The patient, an unmarried lady of 30, had noticed the tumor for only four months; she had had several attacks of pelvic pain in the side on which was the tumor. She made a rapid

and easy recovery, leaving for home on the eighteenth day.

Case II. *Tait's Operation.*—Uterine appendages removed from a case of uterine myoma. Both ovaries consisted of a mass of smooth cysts, and were three times the normal size. The tubes were healthy. The myoma was as large as a child's head. The patient had been married three years, and had never been pregnant. She was much blanched by hemorrhage and watery discharges, which had lasted for five years. She had suffered from fever, abdominal distension, and profuse metrostaxis after the operation, but at the date of the meeting (eleventh day) was doing perfectly well.

Dr. GARDNER said that since September last he had had nine successive successful cases of abdominal section; eight were ovariotomies and one removal of uterine appendages. Of the eight ovariotomies, two were for dermoid cysts. In four of the cases, the second ovary was also found diseased, and removed.

Malignant Stricture of the Œsophagus.—Dr. Geo. Ross showed a specimen of cancer of the œsophagus, the following being the principal facts in the clinical history: A man, aged 54, 6 feet 4 inches high, and who had been immensely powerful, was admitted into the hospital with intense dysphagia and in a state of great emaciation and weakness. There was an intense fœtor of breath, and he had had a severe cough for some time, with a copious similarly fœtid purulent expectoration. He was intemperate, and was in the habit of drinking raw spirits. The difficulty of swallowing had gradually developed during more than a year, until of late even fluids were forced down with the greatest difficulty and straining. There had never been any vomiting or regurgitation of food. An œsophageal bougie of soft, flexible rubber, and of almost the largest size, was twice passed its full length without meeting with any special obstruction. It slid down with ease, and not the slightest force was used. The withdrawal of the bougie was followed by the escape of horribly foul air from the patient's mouth, and the instrument itself was smeared with stinking pus. Physical examination of the chest gave sings of cavity in left apex and of softening deposit, with cavity, localized in right mammary region. He rapidly became enfeebled, and died in about a month from asthenia, continuing to the end to swallow a large quantity of fluids every day, and there was never seen any regurgitation. The diagnosis had been epithelioma of the œsophagus, involving the tube in such a way as to produce all the phenomena of stenosis, and yet permit of considerable potency of the lumen; secondary cancer of the lungs, with gangrene. The autopsy showed an epithelioma of unusually firm texture situated just below the level of the cricoid cartilages and extending for about two inches. I encircled the œsophagus, and the stricture was almost impermeable. It was only after repeated efforts that a No. 2 flexible (urethral) catheter could be insinuated through it. In the apex of the left lung was a large cavity containing a considerable slough lying loose within it; the chamber was excessively fetid. The upper part of the lung was firmly adherent to the diseased portion of the œsophagus, but *no communication* could be shown between the pharynx and the apex-cavity. In the front of the right lung was a mass of cancer which had softened centrally.

Dr. Ross directed attention to some points of the case. He thought the disease might here have originated from the habit of drinking copiously of raw spirits. The absence of all regurgitation was a remarkable feature, considering the high situation of the growth and the tightness of the stricture. He also asked the question: "What course was taken by the bougie?" The tight, firmly organized stricture must have existed for a long time; such a large instrument could not possibly have passed through within two or three weeks of the man's death. The bougie was too large, the space too narrow, and the stricture too high for it to have bent upon itself. Could it have passed into the cavity in the apex of the lung? If so, there must have existed a direct and free communication with this part from the pharynx, which avenue had been subsequently shut off by adhesive inflammation. Except on the latter hypothesis, he was at a loss to explain the facts given above.

The PRESIDENT inclined to the belief that the bougie went down to the stomach, and that since it had been introduced, a few weeks, the growth had increased, producing the high stricture shown.

Malignant Disease of the Rectum treated by Excision and Colotomy.—Dr. Geo. E. FENWICK read a paper on this subject.

Dr. HINGSTON advocates operating if the disease be confined to the bowel; if it does, he prefers colotomy. He has noticed that malignant disease of the rectum does not return so soon as when in the mammæ.

Dr. SHEPHERD said that Dr. Fenwick was to be congratulated upon the results of his operations. He remarked that many continental surgeons removed the coccyx so as to get more room; indeed some remove also the sacrum for this end.

The PRESIDENT said that as a rule colotomy was a much more satisfactory operation when performed for syphilitic stricture than for cancerous. The treatment for syphilis of the rectum progressed better when that bowel was given a rest.

Progress of Science.

BELLADONNA—SOME OF ITS THERAPEUTIC USES.

Dr. P. N. Cilley thus writes in the *Virginia Medical Monthly*. This drug has been selected as the subject for discussion, with no intention on my part to present an elaborate disquisition upon the philosophy of its action, or of even naming but a few of its most prominent virtues, and elucidating its most important effects on the human system. This I will endeavor to illustrate and make clear by mentioning some cases in which I am satisfied it was eminently useful in my hands. My impression is that it has been too much neglected by the profession generally; and my belief in it as an extremely valuable medicinal agent is my excuse for calling attention to it.

I will first report a case of *obstruction of the bowels*, and the treatment employed.

In 1880, immediately after having eaten a hearty meal, while rolling a caskful of corn on its chine across my crib, I was subjected to a sudden, violent twist and wrench of my whole body, requiring a tension of all the abdominal and lumbar muscles to prevent the cask from falling. On the instant of this wrench I experienced a sharp, stabbing pain in the central and outer part of the right hypogastric region. This pain continued very severe, and in a few minutes I was compelled to go to stool, and had a full natural action.

Partial relief from the pain followed the action, but in a short time nausea and faintness set in. Desiring to rid the stomach of its contents, I took an emetic of mustard, which acted freely, but immediately on its action the pain returned.

A rupture was suspected, but a critical examination by my physicians, Drs. Buse and McBee, did not confirm this expectation, but satisfied them of the existence of an obstruction, probably an invagination, or intussusception of the large bowel at its junction with the small intestine. Probably the violent muscular contraction at the moment the trunk was twisted upon itself—the stomach being distended with food—forced a portion of the bowel within an adjacent portion, perhaps the smaller within the larger at their junction—this displacement naturally setting up spasmodic contraction and constriction of the invaginated parts.

A small tumefaction, easy to move, speedily showed itself at the point of pain, not being very sensitive to touch at the outset, but increasing in tenderness on pressure as its size increased. From the moment of its development until its removal I am confident no fæcal matter passed through that point in the bowels.

Anodynes, cathartics, enemas, poultices, hot and cold applications, and a large list of remedies, geneal and topical, were brought to bear on that slowly-increasing tumor, but it held forth against them all; so I will not particularize.

Everything taken into the stomach was speedily rejected, and all enemas were quickly returned.

Local applications doubtless retarded inflammatory action, and anodynes lessened sensibility to pain, but all failed to open this obstructed viaduct.

Large injections of warm water were thrown slowly into the bowels by means of a Davidson's syringe, in order to fill and distend the colon up to the point of obstruction, and thus, if possible, lift off the contracted envelope; but when the fluid began to impinge upon the irritated mucous membrane, there was not strength in my muscles sufficient to resist the violent ejectment of it, and the resulting pain was intolerable.

In the first stages of such an attack, after the spasmodic action of the muscular tissues has had time to abate, and before irritation and inflammation have been set up, I feel assured this form of treatment might often be pushed to success; but, in the more advanced stages, when the tumefaction is well marked, and the integrity of the tissue perhaps involved, I apprehend danger of rupture in using much pressure. In my case I will not say it gave no aid to the other means used, for possibly, notwithstanding the increase of suffering, it paved the way for more effective action of other remedies.

I was attacked on Monday morning, and these enemas were used on Wednesday and Thursday. On the latter day, three drops of croton oil were given but rejected by the stomach instantly.

Later, on Thursday night, a plaster spread with Tilden's extract of belladonna, four by six inches in size, was applied to the right side of the abdomen and kept there. At 2 o'clock p. m. Friday, the surface about the umbilicus and in the right hypogastrium was rubbed with three drops of croton oil, and a plaster of belladonna applied to the entire surface of the abdomen; and five hours latter, eight drops of the croton oil were well rubbed in, and the belladonna again applied, with a warm poultice over it.

At 9 o'clock p. m. on the same day, I discovered for the first time the acrid taste and roughness in throat, characteristic of the belladonna, and, half an

hour later, the small bowel for the first time since the accident set up persistaltic active accompanied by borborygmus. This rapidly found its way down to the obstruction, where a sensation of tugging or pulling became manifest, with a well-marked sensation of slipping in the bowel at the invagination; and I as distinctly felt the inner fold drawn out of the embrace of the outer as I do now my finger drawn out from the grasp of my other hand. I thought I knew what pain was before this, but the slipping of that bowel, each time it moved had such a world of anguish in it as I never felt before, and hope never to experience again.

The bowels were speedily moved, discharging a dark fluid, extremely offensive. Hypercatharsis had now to be guarded against by anodynes and stimulants, and irritation subdued by topical and other remedies, and I was soon on my feet again; but for a year I could not sit in the saddle without pain.

What relieved me, and how? Was not the belladonna an indispensable integer in the cure? We all know it has a wonderful effect in relaxing muscular tissue, and combating irritative contractility of muscular fibre, by paralyzing the motor nerves. Here was wha we desired to unfasten—this grip of the bowel upon itself.

Then, again, it is well understood that belladonna in moderate effect increases peristaltic action by paralyzing the inhibitory nerves which control the intestinal function: might not this increase of peristalsis have been sufficient to untie the knot without the aid of croton oil?

And further, we know that through its paralyzing the peripheral vagi (the inhibitory nerves of the heart), it increases the heart's action, gives more *vis a tergo*, sends a more powerful current through the arterioles into the venous capillaries, establishing an exaltation in the venules. Now, what more reasonable conclusion is to be presumed than that under this exalted circulation, the invaginated and constricted coats of the bowel should have their depressed circulation increased, their lost vitality restored, and their natural functions re-established?

Perhaps the croton oil, carried into the circulation by absorption, was just at this juncture calculated to set up violent peristalsis and open the *primæ viæ*. Had not relief come when it did, I should have insisted on having the cavity of the abdomen opened, and reduction attempted by taxis.

In all such protracted cases, when the bowels are moved, the practitioner should carefully guard against excessive purgation and prostration.

Many years ago, I treated in the same year two cases of obstructed bowels, both young negro men. Belladonna was the leading remedy, and in both the obstruction was removed. The one, in the care of a vigilant master, strictly conforming to directions, made an excellent recovery; but the other, left to the tender mercies of a careless overseer, was neglected, no support being given, and, after long and violent purging, sank and died.

But warm water injections, croton oil, and belladonna, will not cure all cases of obstruction of the bowels. I believe the belladonna more useful than any other remedy, and I have used it locally and internally; but under favorable circumstances, the former method has my preference. I give the solid extract in half-grain doses every hour, until the acrid taste and dilating pupil warn me to discontinue it.

Belladonna is an admirable assistant in the reduction of *strangulated hernia*. Apply the soft extract freely to the strictured neck after softening the surface with warm water, exercise a little patience, and then, grasping the sack with both hands, gently compress it, drawing it away from the neck, swaying it from side to side; and, take my word for it, in nineteen cases out of twenty of recent strangulation, the bowels will be speedily returned—especially if you elevate the hips and relax the abdominal walls.

In *spasmodic stricture of the uterus or urethra*, and in the passage of calculi through these ducts, I have seen speedy relief result from the use of this drug, applied locally, or given internally either by the mouth, rectum or urethra.

In *strangulated hemorrhoidal tumors*, where those oft-repeated spasmodic contractions of the sphincter ani are causing so much distress, nothing can surpass, in promptness, the relief procured by a liberal application of the extract of belladonna to the anus and perineum, after softening the parts with warm water to facilitate absorption. Nor is this relief palliative alone. If given in half-grain doses once, twice, or three times a day, as may be necessary to keep the bowels open, it will permanently cure many cases.

In two cases of *paraphymosis*, it allowed easy reduction, where the knife would have been a terror. Intelligent effort at reduction had been previously used in vain. The extract was applied locally.

In *inflammation of the iris*, or any other portion of the eye, the local application of belladonna should not be neglected, as it prevents or breaks up adhesions that would impair vision. It may be applied around the eye, or a solution may be dropped in the eye, and a cloth dipped in the solution may be applied over the organ.

But the trouble in which I regard it as a remedy, *par excellence*, is in protracted *labor, with rigid, thin, partly dilated os*, where the patient is worn out, irritable and nervous from long continued, short, and sharp cutting pains. From the time of the first masters until now, thousands of plans have been devised to relieve this distressing complication; many of these plans are useful; most of them will relieve if persisted in long enough. But in belladonna I offer one agent that has never failed in my hands to produce a speedy change. With a little of the soft extract on my index finger, I smear it on the os uteri, both without and with-

in heavily, for an inch or more in width all around the ring. But should any obstacle interpose to render its application difficult by the finger, the extract is dissolved in a little warm water, and applied by the aid of a vaginal syringe. The application of the belladonna may occasionally require one or two repetitions, at intervals of half an hour. In most cases, however, before the expiration of that time, the ring suddenly becomes soft and thickened, yielding kindly to the pressure of the head: dilatation occurs with wonderful rapidity, the pains become protracted and expulsive, the nervous irritability subsides, the patient returns with alacrity to the task in hand, and a speedy delivery is the result.

Nor is it less useful in a *rigid perinæum*, if smeared on the parts. But strict care should be observed to support the perinæum through every pain, as the dilatation occurs so suddenly, and in most cases commences to develop its effects at the posterior margin of the perinæum before the meatus is impressed; and in this condition a violent pain might cause the head to pierce the perinæum and tear its way through. I am not quite sure but a free use of belladonna increases liability to post partum hemorrhage. This should be guarded against.

In *dysmenorrhœa* belladonna is eminently useful, especially in that form of it dependent upon a constriction of the cervix and os uteri, a narrowing of their canal, and a dense, hardened and unyielding condition of their tissues. It was extensively used by my preceptor and former partner, Dr. H. V. Wooten, and subsequently by myself, in the formula recommended by Drs. Cartwright and Holmes, of Mississippi.

B. Powder camphor .....135 grains.
Extr. belladonna ..... 27 "
Sulph. quinine..... 27 "

Mix and make seventy-two pills.

On the incursion of the pain give one of these pills, and repeat it every half hour until the violence of the attack abates or a pungent, acrid taste in the throat, resembling tobacco, and dimness of vision, from dilatation of the pupil, warn the medical attendant of the development of the effects of the drug, and point to the propriety of its discontinuance. Relief from pain will surely follow. Occasionally, but not often, the pain returns before the close of that catamenial period, and if so the pills should be repeated. So pointed is the relief from this preparation, that several of my female friends are unwilling to meet these periods unless provided with this combination or some modification of it.

Belladonna often disappoints the profession because of the carelessness or dishonesty of druggists. Be sure you have a reliable preparation, fresh and pure, and you will find it will do all, and more, than I have claimed for it.

THE SPECIFIC TREATMENT OF DIPHTHERIA AND CROUP.

Dr. George A. Lynn, of Monongahela City, Pa., read a paper on this subject before the last meeting of the American Medical Association, wherein he stated that the object of his paper was to show the proper method of using the bichloride of mercury as a specific in the treatment of diphtheria. The mere use of a remedy does not necessarily constitute its use as a specific. For instance if one should attempt to control a malarial fever with ¼ grain doses of sulph. of quinia given two or three times a day, it would most signally fail, and he might say that he had tried the remedy and it had failed in his hands.

So in using the bichloride of mercury as a specific in diphtheria, the dose, time of giving, and stage of the disease, are as important as the remedy itself.

"Without entering into a discussion of the pathology of the disease, I may point out what seems to have escaped the notice of most writers on diphtheria, that there are two distinct stages in the disease; one the disease proper, which lasts from three to five days, and terminates in the full development of the membrane and the generation in it of a deadly poison, the other the effects of the absorption of this poison, which is generated in the membrane only, and not in the blood, but when absorbed in sufficient quantity destroys the red corpuscles of the blood. Patients do not die in the first stages of the disease (except in the croupous form) but only from the effects of the poison absorbed from the membrane.

"Taking this view of the case to use the bichloride as a specific:

"1st. It must be given in the first stages of the disease.

2d. It must be given in large doses, frequently repeated.

"The effect of the large doses of this remedy, given in the early stage of the disease, is to reduce the temperature, relieve pain in the head, back, and limbs, unlock the secretions, lessen the soreness in the throat; in time, to relieve the nausea and vomiting, restore the appetite; and, most of all, it prevents the generation of the poison in the membrane; in mild cases it checks the formation of membrane at once, and causes what is formed to speedily disappear.

"Now, as I claim that the greatest virtue of this medicine consists in its preventing the generation of the poison in the membrane, the absolute necessity of giving it early in the disease becomes evident.

"It will take physicians a long time to find out the value of this remedy, if they persist in only trying it after everything else has failed, and their patient is in a moribund condition; yet even in such cases I have known it to prove successful.

"In using a medicine of so great power, the manner of exhibiting is of some importance. It is best given in solution, so that when excessive

nausea is present, the dose may be gradually lessened and the time shortened, giving the stomach a chance to dispose of it, and at the same time keeping up full treatment. By ordering the druggist to make a solution of the bichloride in alcohol of the strength of gr. j to f. 3 j, and dispensing from this, the weighing of a grain and fractional parts of a grain is avoided. Next in importance is a pleasant vehicle in which to give it; this we have in elix. bismuth and pepsin, or elix. of pepsin. Pepsin itself has a good influence in the disease, and is said to have the property of softening the membrane.

"In a mild case of diphtheria, I give a child 3 years old $\frac{1}{10}$ of a grain, or in a malignant case $\frac{1}{15}$ of a grain of bichloride of mercury in a teaspoonful of elix. of bismuth and pepsin every 3 hours. To an adult I give from $\frac{1}{15}$ to $\frac{1}{8}$ of a grain every 3 hours.

"The manner in which this dose is borne in a bad case of diphtheria is a matter of surprise to a physician using it for the first time. It rarely disturbs the stomach, and soon allays existing nausea. I have never seen it produce ptyalism, and it seldom acts on the bowels more than is desirable. I generally order carbonate of magnesia to be given the first night, and after that the action of the bichloride keeps the bowels open. Under this treatment, when commenced early, in an ordinary case the patient will be convalescent by the end of the third day, but in more grave cases the medicine should be continued to the end of the fifth day—it rarely needs to be given longer.

"Where the disease has made considerable advancement, and the poison of the membrane is already being absorbed, as may be the case before the physician is called, the result may not be so satisfactory, and brandy and iron should be added to the treatment.

"If we assume that this treatment is no better in results than the general method in vogue, still it has many advantages that strongly recommend it.

"There is but one medicine to be given, and there need be no confusion or mistakes. No washes or gargles are needed; no swabs or probangs to be thrust down the throat to strangle and frighten the patient, and make him wish he was dead and at peace; no steaming; no atomizing; none of these—only a teaspoonful of not unpleasant medicine and two or three hours rest. While I hold that the corrosive chloride of mercury, given in large doses in the very early stages of diphtheria, is a specific, because, when so used, it prevents the generation of the poison in the membrane, and soon arrests its formation, yet membrane is often formed before we are called to the case, or before the remedy has had time to stop the process; and in this case it may involve the windpipe, or may be primarily formed there, causing diphtheritic croup; and a new danger arises from mechanical obstruction, for which the corrosive chloride gives no relief.

"The difficulty of breathing is common to all kinds of croup. It is as great for the time being in simple croup as it is in pseudo-membranous or diphtheritic croup. For this and other reasons it is held by good authority that the dyspnœa of croup is not due in the main or even in great degree to the mechanical obstruction of membrane in the windpipe, but is rather due to the spasmodic condition of the glottis, and of nervous origin. It is for the relief of this dyspnœa that we resort to tracheotomy, at all times a dangerous operation, and in diphtheritic croup almost hopeless. In any kind of croup the operation, if successful, only enables the patient to breathe. Its effect on the disease is rather to aggravate than otherwise. If we had a remedy that would control and relieve the spasmodic condition of the glottis in croup, we would have little need for this operation. And I think we have this in the chloride of gold. A few years ago I was using the chloride of gold, as recommended by Niemeyer in his practice, in some obstinate cases of hysteria, and observed that it had marked effect in nervous affections of the air-passages, and was thus led to try it in a bad case of diphtheritic croup, with good results.

"Since then I have used the chloride of gold in all cases of croup. In simple croup it acts as a specific, and nothing else is needed, and but few doses of this.

"The chloride of gold should be given in solution in distilled water. As it is very deliquescent and difficult to weigh, I direct the druggist to dissolve the contents of a 15 grain bottle,—as it comes from the manufacturer—in 15 drachms of distilled water, and dispense from this solution.

"A caution is necessary in administering—not to use a spoon, on account of the strong affinity the preparation has for metals, especially for silver. I direct it dropped in a glass with a little water, and as it is almost tasteless there is no difficulty in taking it. The does may be from $\frac{1}{15}$ to $\frac{1}{10}$ of a grain every one to three hours."

WEAK HEART.

We take the following from the *Medical Press*, March 18, 1885:

Every physician in extensive practice is occasionally brought into contact with cases of heart failure, of which the essential nature is somewhat obscure, and which are frequently recorded, when terminating fatally, as angina pectoris. As an example of the kind of illness typical of such affections some such history as the following may be taken: An apparently healthy man of sixty or sixty-five, of florid build and choleric temperament, is attacked soon after the exhibition of unusual excitement, with acute pains over the cardiac region, accompanied by shooting pains down the left side and arm, and a general sense of oppression. There is no loss of consciousness, no actual paralysis, although some degree of numbness may be experienced in the hand, but without materially

diminishing the force of its grasp. Occurring in the absence of the physician, the bystanders administer stimulants, and resort to rubbing the arm of the sufferer, with resulting relief to the symptoms; and in an hour's time probably the attack so far remits as to admit of the patient's moving about more or less freely; or a fatal termination may then and there occur. It is more likely, however, that, as in the most recent cases of the kind we have encountered, an interval of rest will be noticed, and then on a renewal of movement, the symptoms will once more set in, this time, perhaps, less violently than at first, and apparently ending in the appearance of quiet repose, during which death ensues almost without any indication of its approach.

Very often the subjects of such illness are unable to recall that they have ever been similarly attacked; they have not, that is, as is usual among the victims of angina pectoris, been for a greater or less number of years suffering from spasmodic affections of the heart, and to their own knowledge this organ of their economy is free from any kind of disease. Nor as far as our own experience goes does auscultatory examination yield any positive or reliable signs, with the exception that its sounds are distant and indistinct; but the most careful observation will fail to make out anything deserving the name of diagnostic indications. Moreover, the evidences of cerebral lesions are altogether absent, and the suggestions of any such origin for the symptoms exhibited in the cases described must be entirely excluded on purely clinical grounds. Neuralgia also can hardly be accepted as explaining the phenomena, inasmuch as a sudden single attack of so violent a nature as to produce a fatal result is improbable, to say the least; and wherever this cause is responsible for death it is reasonable to assume that the final illness will have been preceded by less severe indications of cardiac neuroses. It is consequently necessary to look for some other producing caues of the effects, and this may with some assurance be assumed to reside in a deterioration of the heart itself. As already hinted, the subjects generally found to suffer in the manner under discussion are those in whom the existence of fatty heart might be reasonably suspected; and the *modus operandi* of the changes taking place under such conditions is not difficult to comprehend. As the structure of the walls degenerates the propulsive power of the heart is *pari passu* reduced, and a time ultimately arrives when its action suffices only to maintain the circulation, under conditions of ordinary and unexcited life. Even now, however, the habits of the individual are unconsciously adapted to the failing strength of the organ; all unusual exercise is avoided, and without at all being aware of the fact, the patient foregoes most of his customary exertion, the only point which presents itself to its mind being that he is "growing old." This may continue for a length of time, but should it happen at any moment that either by indulging in a fit of passion, or by taking sudden and violent exercise, the heart is called upon to perform a labor beyond its diminished powers, then the strain becomes more than it can resist, and the attack described results. The popular remedy, a stimulant, usually in the form of whisky, which is at once administered, acts as a temporary aid to the exhausted organ, which, however, is left in a still more exhausted state when its effects have disappeared, and being then still under call to continue its normal action, it responds with rapidly lessening strength to the needs of the circulation, and with or without a renewal of severe symptoms it slows into death.

Such, we take it, is a general explanation of a large proportion of the deaths which have of late figured in reports as being caused by angina pectoris, and the frequency of which has caused some degree of surprise. We cannot, however, hope that treatment is likely to be materially assisted by acceptance of this view, since the structural degeneracy of the implicated organ must necessarily militate against any permanent restoration of its function; the more especially as the occurrence of an attack of illness offers a certain indication of its being inadequate to meet the calls made on its resources. Such failure in fact is proof that the organ has advanced so far in decay as to render its performance of even ordinary work uncertain, and it is suggestive that a greater part of the cases observed are seen in persons in whom on *a priori* grounds, fatty changes are indicated. Possibly, also, many other sudden deaths, the reason for which is often obscure, may have been brought about by similar means; and the subject is at least one worthy of receiving attention.

TORTICOLLIS.

Bartholow, Jour. Am. Assoc.

A great deal can also be accomplished by gymnastic training under the direction of the will, which should be used to educate the weaker muscles to antagonize the stronger; it is wonderful how much can be accomplished in this direction by the force of the will. All drugs that have a reputation for controlling muscular spasm have been tried in this affliction, and hyoscyamus and gelseminum have done some good, but they do not cure. Arsenic thrown directly into the muscle, by hypodermic injection, has done more good than anything else; its use was begun empirically, because it was known to do good in chorea, which is a disease somewhat analogous to torticollis; some very obstinate cases have been thus cured by arsenic. Cocaine, the drug of the day, has also been used with advantage, injections of one-sixth or one-fourth of a grain being made. While these injections are being made into the contracted muscles, strychnia should be similarly used in the paretic muscles. By these combinations we can generally cure the disease, if there be no lesion of the nerve, but we shall find it a very obstinate disease to handle.

A CHERRY-PIT IN THE EAR OF A CHILD.

Dr. David Webster reports this case in the *Archives of Pediotrics:*

On Thursday, July 24, 1884, at 11 a. m., a girl, nine years of age, while engaged in a frolic, had a cherry-pit blown into her right ear from the mouth of an older sister, with whom she was playing. Half an hour later, she appeared at the office of the family physician, who happened to be absent. She was then taken to the office of another doctor in the same village, who tried to remove the foreign body with a hair-pin, and failed. At one o'clock the same day she was taken again to the family physician, who tried to remove the pit with a small dissecting forceps. The tenderness by that time was very great, and the child had become so intolerant of manipulation that his effort was very short. He therefore sent the child away, advising delay. Nothing more was done to the ear until Sunday, August 3, when the doctor went to the house and tried syringing for half an hour. Not succeeding, he put the child under ether, and tried again to remove the pit with forceps; but as he found he could not readily grasp it, he "gave it up," and on the following day, August 4, he brought the child to me.

Upon examination, I found the auditory canal red, swollen, and sensitive at its inner third. The swelling seemed to diminish the lumen of the canal by about one-half. The extremity of the canal was blocked up by a reddish mass, which was hard to the touch of the probe, and insensitive. From the history, I had no doubt that this was the cherry-pit. The hearing power of the ear was reduced to 2-60, as measured by my watch. The child had suffered pain only during, and immediately subsequent to, attempts to remove the foreign body.

The question now arose as to what would be the best course to pursue. It was evident that it would be extremely difficult to remove a hard, unyielding body like a cherry-pit through a passage having a diameter much smaller that its own, Any effectual attempt to do so would necessarily involve very considerable amount of violence to the parts. Therefore, as the symptoms were not urgent, I thought it would be wise to delay any operative interference until the swelling of the walls of the canal had subsided. I advised that the ear be douched with warm water thrice daily by means of a fountain syringe for a week, when the child should be brought to me again, and then, if the conditions were favorable, I would attempt the removal of the foreign body. About a week later, instead of seeing the patient again, I was gratified by receiving a letter from her family physician, in which he stated that on Friday, August 8, after having douched the ear thrice daily, as advised, for three days, the cherry-pit came out while the douche was being used.

It is probable that in this case the foreign body might easily have been removed in the first place by a judicious use of the syringe. It is not improbable that every attempt at its removal by means of the hair-pin and the forceps, only lodged it deeper in the canal, and irritated the contiguous parts, thus helping to increase the swelling of the walls of the passage, already inclined to resent the presence of a foreign body. I have not seen the patient since, but her physician, to whose kindness I am indebted for so complete a history of the case, informs me that the hearing is still considerably impaired.

TREATMENT OF NIGHTSWEATS.

In the *Gazette Médical de Paris* we find two suggestions as to the relief of phthisical and other nightsweats. They are both simple enough and certainly merit a trial.

In the first procedure it is directed that the trunk be sponged or rubbed with a mixture of four parts of tincture of belladonna to thirty parts of water. The lotion is best applied by pouring it into the hollow of the hand and bathing the body an hour or two before the expected sweating.

In fifty cases cited but one failure to snppress the perspiration is recorded.

The second method consists in sponging the body of the patient with a solution of eight grams of chloral hydrate in one goblet each of water and whiskey. If the sponging alone does not suffice the patient should wear a shirt that has been dipped in the solution and then dried at a moderate heat. In the non-phthisical nightsweat of children this device is said to yield excellent results.

In practice I generally find that we have at least three distinct varieties of rheumatism: 1. The sthenic. 2. The asthenic. 3. That variety caused and preceded by other diseases, as gonorrhœa, scarlet fever, etc.

I shall not deal with the pathology of rheumatism at all; but in this patient there is a tendency to inflammation of certain tissues, and to the accompanying fever. He sleeps in a damp bed, or catches cold in some way, and then comes on the attack. These are the cases where salicylic acid, salicylate of soda, and the bicarbonate of potash are beneficial. Of the two, I am inclined to think that I have seen more benefit derived from the salicylate than from the bicarbonate; but I frequently begin by giving the salicylate, and then go on with the potash. Attention to little details we all find in rheumatism, as in all other complaints, of great importance. For instance, covering the whole or the front of the chest with a layer of cotton wadding has often, I am sure, prevented an attack of pericarditis from coming on; and I found a night-shirt of very thin wool very useful, as these patients, perspiring much, are very apt to catch cold; in fact, I now recommend all my rheumatic patients to wear it regularly, and many have been very thankful for the advice.

THERAPEUTIC HINTS AND APPROVED FORMULÆ.

Dr SAM'L. S. WALLIAN, (*Med World*).

Dysentery.—Full hot bath, followed by thorough and continuous fomentations over the whole abdomen, and free enemata of as hot water as can be borne. Instead of clear water, milk and water may be used, or a weak solution of chlorate of potassium.

Strict abstinence from solid food must be enjoined, milk or Mellin's food forming the best diet. Sub carbonate of bismuth, or benzoate of soda in 10 grain doses, each dose to be followed by half a pint of hot flaxseed tea, hot milk and water, or simply *very hot* water, is an excellent treatment.

Dysmenorrhœa.—Apiol, monobromated camphor, permanganate of potassium, hot hip and sitz baths, massage, electricity, either galvanic, faradic, or both alternately; cemicifuga, viburnum opulus, oxygen and nitrogen monoxide combined.

Dyspepsia.—Hydra-headed and many-featured dyspepsia:—

First wash out the stomach. How shall this be done?

Use a stomach tube of softest rubber, with or without pump attached, or if squeamishness on the part of either patient or *practitioner* makes this infeasible, establish a thorough system of *hot water drinking.* Let there be imbibed (sipped slowly) twelve to sixteen ounces of very hot water (simple water is not flat when decidedly *hot*), or hot, weak lemonade or tamarind water, *an hour or more* before each meal and at bed time.

This should be punctually and persistently followed for from two to six months.

The diet may be varied and should be nutritious and as liberal in quantity as can be well managed by the system. Starvation is bad treatment; overfeeding is also bad. Massage, the current, open air life, oxygen modified. Drugs are for the most part delusive palliators. Some bitter tonics, as hydrastis, alumin, nux vomica, prunes Virginiana, etc., may be used as adjuncts, and sub carb. bismuth, hydrocyanic acid diluted, deoscorein, etc., for painful manifestations. Cascara sagrada is the best laxative. Pepsin may be used temporarily and as a palliative.

Intestinal indigestion may require pancreatine or peptonized food.

Dysuria.—Hot bath, hot fomentations over the bladder, fl. ext. urtica dioica, corn silk, cantharides (in homœopathic doses).

Eczema.—Constitutionally, the oxygen treatment persistently carried out relieves a majority of inveterate cases. Locally, alkaline washes, tar and zinc ointment, *hot* local bathing (very hot), Turkish and Russian baths, tar ointment with 3 ss pulvis ararobæ to each ℥ j. Try also oil of cade, green soap, glycerite of tar (for itching) borax, benzoin.

Emphysema.—The oxygen treatment relieves more effectually than any other. Jaborandi, lobelia, ether, quinia, camphor, iodide of potassium may be of service in appropriate cases.

Empyemia.—Oxygen treatment *very freely, exhibited*, quinine, solutions of chlorine.

Epilepsy.—Constitutionally, the oxygen treatment has succeeded wonderfully with younger subjects, say under 18. Bromides of amnonium, sodium, and lithium, electricity (constant current), ether, amyl nitrite, open air life, nourishing diet, massage.

Epistaxis.—Hot water (douche), spinal hot water bag; elevate the arm on the affected side; very hot applications to the forehead, compression, post-nasal plugging, styptics (powdered alum acts well).

Erysipelas.—Internally, tincture of iron and quinia (traditional repute); locally, a strong solution of *sulphite of sodium* on saturated cloths covered with oiled silk, proves an efficient germicide (?). Tincture of iodine with glycerine and carbolic acid also acts well. Nourishing diet, mild cathartics.

CASCARA IN CHRONIC FUNCTIONAL CONSTIPATION.

BY RALPH D'ARY, ROMEO, MICH.

This is not intended to be a treatise on constipation in general; therefore I shall not take up space in enumerating its various causes and forms. My object is simply to communicate my experience, in the treatment of this common trouble in its most common form. As we generally meet with it in practice it is due to no one of its etiological causes, singly or separately, but to their combined action. Whether due to muscular torpor of the intestine or to suppression of the habit of regular evacuation of the bowels, or to deficient glandular secretion, etc., at the time the physician is consulted, all three of the above principal causes are generally in full operation, with sometimes one or the other slightly predominating, but not commonly to such an extent as to call for isolated treatment. The latter must therefore of necessity be directed against all of them. And since both muscular and glandular torpor are due to deficient innervation, it is plain that by increasing the latter and inducing patients to correct neglectful habits we ought to succeed in curing chronic functional constipation. And yet what disease is there that more obstinately defeats our endeavors? We prescribe for our patients a combination of drugs carefully selected for their specific physiological effects, long since fully proven by experiment and accumulated experience. Then we await results. At first the report is excellent. The disease seems completely under control of our remedies. The functions of the bowels are performed faultlessly, and our patient's health improves *pari passu*. But disappointment soon follows. The patient soon discovers that he is not being cured, and that the effect of the medicine is but transient. As soon as he omits the medicine he relapses into his former condition. Nay, worse! He finds that from

time to time he has to permanently increase the dose in order to obtain the wonted effect, until finally he is converted into an inveterate pilulophage, a miserable slave to his pill. Am I wrong in saying that this is the history of the great majority of patients that have become subjects to chronic constipation? Forensic reasoning seems to be entirely at fault, and the patient himself, without the doctor's aid, soon plunges into the wildest experimental empiricism, trying every patent medicine within his reach, and generally with no better luck. I could speak of no more cheerful success in the matter of treatment until I had some experience with cascara sagrada. At first I was much disappointed in its use, for I could see no advantage over older and better-tried drugs, and several decided disadvantages, especially the slowness of its action and the peculiar soreness of the bowels caused by it, and which is often quite persistent. It would be useless to detail my numerous experiments, and I will simply state that I became convinced that cascara, alone and uncombined, in my practice had no very decided results. Its action somehow always seemed to fall short of the desired end. Gradually I came to the conclusion that its action was truly elective of the bowels, but that it ended there, and that in order to make a complete remedy of it, it needed to be combined with other drugs that would act principally through the nerve-centres, and thus give both a central and peripheral impulse of innervation of the intestinal canal until normal function was established. The following formula was the final result of my experiments:

Ext. cascara.....gr. iv
Ext. nux vomica.....gr. ½
Ext. belladonna.....gr. ¼
Resin euonymus ....
Resin xanthoxylum.....ää gr. iii
Oleoresin capsicum..... .....gr. ¾
Make fifteen pellets.

These fifteen pellets were intended to represent the ordinary maximum dose if taken at once. I have now prescribed it over three years. Part of my experiments were conducted with a combination of fluid extracts of the above drugs of corresponding strength of dose. The object of subdividing the ordinary maximum dose into fifteen pellets was a twofold one: firstly, to allow the patient to find as nearly as possible the exact strength of dose needed, and, secondly, to allow of a very gradual lessening of the dose. For, I am happy to say that in the above formula I have found the cathartic or laxative that would admit of a gradual lessening instead of the usual tendency to increase the dose. And herein lies its whole value and my excuse for calling attention to it. By its use, where not contra-indicated by some form of spinal or other disease, one may look forward to a permanent cure of chronic functional constipation. We are not always privileged to retain patients under observation for the length of time necessary to complete a course of treatment, even where the latter is faithfully persisted in by an intelligent patient, and sometimes because the patient gets tired of prolonged systematic attention to his own case, and drops or hopelessly neglects the treatment. For these reasons many of my patients for whom I prescribed the above formula escaped my prolonged observation, and I am left in the dark concerning the effect of my prescription; but I can truthfully say that of those who under my observation complete their course every one was cured. Failures, no doubt, will not lack in the future, and may have been in the past; but the latter have not come to my knowledge, and I therefore regard this method of treatment as a success. I generally give the following directions to the patient: Take five pellets at night only, increasing the dose by one or more pellets every night until the action is sufficient. Then continue to take this number (whatever it may be) every night for one week, if possible. For the next week lessen your dose by one pellet, and so forth, lessening the nightly dose by one pellet for every succeeding week. If at the end of this course constipation still persists, begin again with about five pellets less than at first, going through with the same gradual decrease. A cure may confidently be looked for.

DEODORIZED IODOFORM.

Many attempts have been made to overcome an almost fatal characteristic of iodoform—its disagreeable smell—without destroying the antiseptic virtues which it possesses. Surgeon-Major Oppler, of Strassbourg, has just communicated to the *Centralblatt fur Chirurgie* the results of some experiments in this sense, which seem to have solved the problem. He takes finely-ground coffee and mixes it with the iodoform in varying proportions; 30 per cent. of the coffee almost neutralizes the odor, while 40 to 50 per cent. completely destroys it. Mixed with iodoform ointment (1-10) in the same proportion, coffee quite deodorizes it. A point of great importance is that coffee itself possesses great antiseptic power, and exerts no deleterious effects on the wounds. Thus a smaller quantity of iodoform suffices, the disagreeable odor is abolished, and the occasional evil effects are done away with. Coffee has the power not only to arrest decomposition, but also to postpone it. Professor Lucke is of opinion that coffee-iodoform may answer well enough for outward applications, but that it is unsuited for the interior of wounds, as the coffee would be a foreign body and interfere with healing. The coffee, previously roasted, of course, must be ground into a very fine powder before the iodoform is added, and the two must then be intimately mixed. Time alone can decide whether this combination will secure a much desired end; or whether, like pepper-mint oil, tonquin beans, tannin, Peruvian balsam, and other substances which have from time to time been tried, the iodoform will prove itself the stronger.—*Medical News.*

DIET FOR THE SICK.

In speaking of milk as a diet for the sick, Dr. William Roberts (before the *Brit. Med. Ass.*) says, that not infrequently the stomach is not able to digest the milk and we have curds passing from the bowels: here he recommends peptonizing the milk by means of pancreatic extracts. The bitter flavor of peptonized milk is, however, nauseous to many invalids, and you cannot peptonize milk without developing this unpleasant flavor. One of the best means of covering the taste of peptonized milk is to add coffee to it. Another device, which may sometimes be adopted with advantage, is to add the pancreatic extract to cold or iced milk. In the cold the action of the ferment is comparatively slow, and it takes some hours to produce an appreciable change of flavor. But as soon as milk, thus charged with the ferment, is swallowed and passes into the warm atmosphere of the stomach, it is rapidly digested.

A new preparation consisting of the pancreatic enzymes in a highly purified state, under the form of a light, nearly white with powder, is absolutely free from taste and smell. Combating again the popular and erroneous idea of the nutritive value of beef tea, Dr. Robert says: "Beef tea and its congeners, however, take rank as restoratives and stimulants, rather than as nutrients. They contain no albuminous matter in solution, and the small quantity of gelatin contained in them cannot be of much account. There is a wide spread misapprehension among the public in regard to the nutritive value of beef tea. The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry, hard remnant of meat fibre which remains undissolved is exhausted of its nutritive properties; and this latter is often given to the cat or dog, or even, as I have known, thrown away as useless rubbish into the midden. A deplorable amount of waste arises from the prevalence of this erroneous notion in the households of many who can ill afford it. The proteid matter of meat is, as you know, quite insoluble in boiling water, or in water heated above 160° F. The ingredients that pass into solution are the sapid extractives and salines of the meat, and nothing more, except some trifling amount of gelatin. The meat remnant, on the other hand, contains the real nutriment of the meat—and if this be beaten to a paste with a spoon, or pounded in a mortar, and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible form of food."

Speaking of cold made meat infusions, he says: "Infusions made from minced meat with half its weight of water, and allowed to stand for two hours, and then pressed through cloth, were found on analysis to contain over four per cent. of dry albumen. This amount of proteid is equivalent to that contained in cow's milk. The nutritive value of such infusions is, therefore, very high. When heated to the boiling point they coagulate into a solid jelly. Made from beef or mutton, the product has an unpleasant bloody appearance; but when made from veal, the coloration is much paler. The best preparation, however, is made from the meat off the breast of a chicken."

While cooked eggs are more digestible than raw ones, yet when the stomach is weak and unable to digest solid food, beaten up eggs pass through the duodenum without being meddled with, and are slowly digested in their passage down the intestine —*Med. and Surg. Reporter.*

GASTRO-INTESTINAL INDIGESTION.

Keating recommends the following treatment of acute gastro-intestinal indigestion in teething children:

℞ Hydrarg. chlor. mit., ...gr. i.
Pulv. ipecac., ...gr. ss.
Soda bicarb.....grs. viij.
Sacch. lact.....grs. x.
M. ft. chart. iv.

This is to be followed by a dose of castor oil, and then the child should be placed on a careful diet for a day or two, and given the wine of pepsin in half teaspoonful doses, or the elix. cinchona co. —*Archives of Pediatrics.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL MARCH, 1886.

AUSTIN FLINT, M.D., LL.D.

The profession in Canada will learn with profound sorrow of the sudden death, on March 13, of Dr. Austin Flint, senior. The sad event occurred at his residence in New York as the result of cerebral hemorrhage.

Dr. Flint had been in his accustomed health, and had attended a meeting of the Faculty of Bellevue Hospital Medical College on the previous evening. Upon returning home, he retired to bed apparently as well as usual. Toward midnight he complained of severe pain in his head. The symtoms of cerebral hemorrhage rapidly developed,

and he soon became unconscious. His son, Dr. Austin Flint, Jr., and others were at once summoned. All remedial measures, however, proved unavailing. Dr. Flint's vital powers slowly ebbed, consciousness did not return, and at 2 P.M. of that day he died.

Dr. Flint was born at Petersham, Mass., on October 12, 1812, of a lineage honorable in medicine. His great grandfather, Dr. Edward Flint, practiced at Shrewsberry, Mass.; his grandfather, after whom he was named, was a private and afterward a surgeon in the Revolutionary Army, and his father, Dr. Joseph H. Flint, was a distinguished surgeon, residing at Northampton, Mass.

Dr. Austin Flint began his medical studies at Harvard, and received his degree from that school in 1833. After practising for three years at Boston and at Northampton he settled in Buffalo, and by his numerous and valuable contributions to medical literature he rapidly rose into professional prominence. In 1844 he was appointed to the Chai of the Institutes and Practice of Medicine in Rush Medical College,Chicago; but he held the position for only one year. In 1846 he founded the *Buffalo Medical Jonrnal,* and during ten years he was editor. In 1847, in conjunction with Profs. James P. White and Frank H. Hamilton, then of Buffalo, he founded the Buffalo Medical College, and he filled the Chair ofMedicine in its Faculty until 1852, when he accepted the Chair of Theory and Practice in the University of Louisville. In 1856 he returned to Buffalo and again became connected with the Buffalo School. The winters of 1858 to 1861 were passed in New Orleans, Dr. Flint having accepted the Chair of Clinical Medicine in the New Orleans school of Medicine.

In 1859 Dr. Flint removed his residence from Buffalo to New York City, and shortly afterward he was appointed to the chair of Pathology and Practical Medicine in the Long Island College Hospital, and this position he held until 1868. In 1861 he was appointed to the Chair of Medicine upon the organization of the Bellevue School, as well as Visiting Physician to Bellevue Hospital. In 1872 he was elected President of the New York Academy of Medicine, and in 1883–84 President of the American Medical Association.

Dr. Flint's contributions to medical literature were numerous and valuable.

The work, however, which added most to his reputation as a medical author was his "Treatise on the Principles and Practice of Medicine," which appeared in 1866, and which has passed through five editions. It at once took high position, and became a favorite text-book in all the medical schools of the United States and Canada. In addition, Dr. Flint has also written a work on "Clinical Medicine," a volume on "Phthisis," essays on Conservative Medicine and Kindred Topics," and a "Manual of Auscultation and Percussion." He contributed the articles on "Pulmonary Phthisis," and on "Neuroses of the Heart" to the "System of Practical Medicine by American Authors." In addition, he has been a voluminous contributor to periodical literature.

LOCAL AND GENERAL.

The Philadelphia *Medical News* publishes a very interesting paper on a case of retro-peritoneal spindle-celled sarcoma, by Dr. Wm. Osler. The patient had polyuria, passing seven pints of urine, sp. gr. 1.004 with a trace of albumen, during the 24 hours for several weeks. This symptom was, Dr. Osler thinks, caused by pressure of the large tumor upon the renal or solar plexus. The irritation was only temporary, as the amount of secreted urine fell to normal some time before the patient died. No dissection of the nerves could be made—a matter of regret as we know very little about the causation of diabetes insipidus, and this case seemed to be one that might have thrown light upon an obscure subject had the condition of the sympathetic in the region of the tumor been discovered.

The same number of "*The News*" contains a short article by Dr. W. A. Edwards on Supernumerary Mammary Glands and Nipples. I remember that a case reported by Dr. Campbell at a meeting of our local Medico-Chirurgical Society brought on a discussion of this interesting subject. Dr. Edwards tells us that only some 105 cases of polymastia are reported in literature, but Leichenstern and Mitchell Bruce think they are comparatively common, the latter authority setting down their frequency (as shown by the examination of 3956 persons) as great as 1.54 per cent. All observers agree that they are most frequent on the thorax, usually on the left side, and in the great majority of these instances below the normal mammæ.

They have been described in other situations such as in the axillæ, below the costal cartilages, over the scapulæ, etc.

The morphological question as to whether these are examples of the law of "reversion to original types," or whether they are truly accessory mammæ or enlarged sebaceous glands may be answered by showing that they do not imitiate in their situation and structure those of any particular mammal, as they would do if they were genuine reversions; that the lower mammalia have similar adventitious glands; and, finally, mammæ with true milk-bearing glands are also found in the human male in unusual situations.

I am very pleased to see that the proposed *crèche* will likely be successful. How to assist and yet not pauperize the poor, and especially the poor mothers of a large city in their struggle for existence and in their efforts to bring up a large family of children, is a problem worthy of the consideration of every medical man.

He knows best of all how many women of the lower classes are kept in ill-health by the worries and the cares incidental to the management of a household upon a small and precarious income. To relieve her for a certain number of hours of the day of this constant care will confer a boon upon many an overworked woman who might otherwise be obliged to seek needed rest in hospital.

We badly need another aid to the deserving poor, and that is some system of nursing them at their homes while laid up from illness. It has been suggested that women of their own sphere of life should be trained not only to do the required nursing but to assist in the house work while the mother is prevented from attending to it.

The fees receivable by nurses of this class might be paid partly by public subscription and partly by the patients themselves. There is urgent need of some such system in this city. The annual cost would be small and great good might be accomplished thereby. If some charitable association would take the matter in hand I am sure it would receive the hearty support and co-operation of the profession.

I suppose we shall have the usual rate of infantile mortality during the next summer. The cries of the innocent go up for a summer sanitarium, but no one appears to heed them.

With St. Helen's and Nun's Islands close at hand, and suitable sites thereon for a temporary hospital resort, it is a pity that nothing can be done to fight the grim array of deaths from diarrhœa, cholera infantum, dyspepsia, infantile debility and all the other evils that largely result from life in close, hot and ill-ventilated houses. The fresh, cool air of the St. Lawrence would work wonders for many a child struggling with disease, and it is a wonder that in this city of charities and high death-rate among children nobody has taken up the work.

"Comments on Pasteur's Method of Treating Hydrophobia" by Dr. Chas. W. Dulles of Philadelphia, a reprint from the MEDICAL RECORD, has come to hand and deserves the attention of every unbiased searcher after truth. Pasteur was a great scientist long before the world heard of him in connection with the treatment of rabies, and it seems to me a pity that his claim upon our gratitude and our respect, should not have rested alone upon the work which in the past he did so well for France and for all mankind.

This hydrophobia rage, as in my humble way I pointed out some time ago, is a transitory thing which when it subsides will detract greatly from the fame of the man who first gave it birth. Even if Pasteur has discovered a cure for hydrophobia it is of exceedingly little importance to us in Canada. Of the millions of dog bites that have occurred in this small Dominion of ours how many in the past ten years have resulted in human rabies?

As far as I know, not one, and I question whether any living Canadian doctor has ever seen here a genuine case of hydrophobia.

With Dr. Dulles' conclusions as to the results of Pasteur's method I entirely agree: "One death under his hands, with a lame explanation; over a hundred persons to testify that his inoculations probably do no immediate harm; an almost equal number to illustrate the well-known advantage of having one's fears allayed—in all, no more than is credited to a host of nostrums. Besides which, the excitement it has aroused has brought about a senseless alarm in regard to dogs, and the killing of innumerable innocent and unfortunate animals to bear witness to the sharpening of men's fears and the dulling of their judgments."

P. A. LAVER, M.D.

MONTREAL, March 20th, 1885.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, APRIL, 1886. No. 7.

CONTENTS.

ORIGINAL COMMUNICATIONS.

Valedictory Address to Graduates.... 481
Medico-Chirurgical Society of Montreal 484

PROGRESS OF SCIENCE.

Clinical Lecture..... 486
Cough 488
Feeding by Rectum..... 491
Chorea Successfully Treated with Hyoscyamine..... 493
Amenorrhea..... 494
Schultze's Swinging Motions to Revive Asphyctic New-Born Children..... 495
Water as a Diuretic 496
Treatment of Cholera..... 496
Removal of Foreign Body in the Urethra..... 497
The Nocturnal Cough of Children.... 497
Ice to the Spine in Obstinate Vomiting 497
Bismuth in the Treatment of Sweating Feet..... 497
Treatment of Pulmonary Consumption 498

EDITORIAL.

Fifteenth Annual Convocation of the Medical Faculty of Bishop's College 498
The Blood-Plaque..... 500
Personal 500
Reviews..... 500
Local and General..... 502

Original Communications.

VALEDICTORY ADDRESS TO GRADUATES.

Delivered at the Medical Convocation of Bishop's College, April 13, 1886.

By the Rev. Prof. SAUNDERS, M.D.

MR. CHANCELLOR, LADIES AND GENTLEMEN :—

On behalf of the Medical Faculty of Bishop's College I thank you for the kind interest in our work which you manifest by your presence here to-day.

It is cheering to us after the toils and often self-denying efforts of another session, to meet you under circumstances so pleasant.

It serves to stimulate us to increased zeal, and must also be inspiring to the students to see and feel that there are those outside who are not indifferent to their trials and triumphs, but who come here to crown the successful competitors with the laurels of their approval and applause.

And you, the members of the Graduating Class, I most heartily congratulate on the successes which have crowned the struggles of years and the golden portal to which you have now arrived, and which now stands open before you, inviting the trained athlete to still greater struggles and still greater honors. I am not at all sure that the Faculty has acted wisely in placing this duty on my shoulders to day. It is almost impossible for me to realize that I am speaking for them. Some of you have been my fellow-students. With you I have joined in the boisterousness of student life. With you I have stood amazed at the profound learning and wisdom of these "most potent, grave and reverend signors." With you I have stood in blank despair as we have crept along the shores of the vast sea of Medical Science, and wondered how it could be possible to sound its depths and reach out to its mighty headlands.

However, you have been learning something about nature's wondrous laws of compensation, and perhaps they come into play just here, and after all even this fact may not be without its advantages; and while those whitening heads and study-furrowed brows stand before you as giants whose medical power and skill strike you with awe, I stand as a kind of connecting link between you and them, and having so lately emerged from the chrysalis state, and so lately donned professional wings I may perhaps be able to enter more fully into sympathy with you in your present feelings and aspirations. In my anxiety to discover some personal fitness in myself for the work now allotted to me I have thought that perhaps in my semi-professional position I may be able to offer some suggestions from that standpoint that may be of service to you. We are so apt, while engrossed with our particular duties to become narrow, and scarcely to heed what is going on outside of our own lines, and therefore, occupying as I do a position somewhat outside, I may be able to give you a hint or two as to what outsiders think and say about medical men.

And as I am in the habit of dealing with the most serious concerns of men I trust you will to-day pardon what may appear to you to be the undue seriousness of the remarks which I may make. I hardly need to tell you that if the accumulation of *wealth* is the goal which you have set before you

in life you have taken the wrong turn in the road. I believe the profession is fairly well paid perhaps; but few medical men amass wealth to-day, a bare living is about all that comes to the lot of most, with perhaps a little to lay up for a rainy day. But grander rewards than gold lie before you, sublimer honors await you if you love your profession and are determined to excel. In no profession perhaps is it more true that there is plenty of room at the top, aye, and plenty of fadeless crowns to be had for the winning. Your calling is among the loftiest that a man can follow. In its ranks have stood some of the grandest men in earth's honor-roll, even the perfect Man himself. The mighty Teacher of men did not despise the office of physician, but went about healing those who were diseased. Keep ever before you the loftiness of your work; do not descend to quackery or charlatanism.

We shall follow you with a jealous eye. Your successes will be ours, your triumphs will make us glad, while your failures and dishonors, if unhappily they should come, will smite us through with sadness. You belong to a college which is youthful and vigorous, but which perhaps can hardly be called strong as yet, or at least only strong in the unquenchable zeal of its Faculty and Alumni; in its determination to excel in the quality of the work which it does, and in the profound conviction that it has a work to do in this land, and that whatever may betide, and at whatever cost, it will continue to make room for itself and advance to the utmost of its power the cause of medical training throughout this broad Dominion. We therefore look to you—by the eminence which you may obtain in your profession—by the successes which you may achieve—by the laurels which you may win—and by the interest which you may show in the welfare of your Alma Mater to help us in our toil of duty and love.

Let me urge you, first, all to be men—men of thought, men of science—don't drift.

The stream of human life is being blocked up with drift-wood. It is so easy to drift.

One of the first temptations that will meet you as you go out into your profession will be to drift into a mere rule-of-thumb practice—A mere routine manner of prescribing certain stereotyped blunderbuss formulæ, which are fired off simply because they happened to have appeared to do some one good some day, or because there are so many ingredients in it that it will be almost sure to hit something.

Make every case a special study—be specialists in that sense—these are the specialists the profession most needs. Remember that it is the duty of every physician to patiently, persistently and scientifically investigate every disease he is called upon to treat. In no other way can you become competent practitioners. It is your duty to yourself—it is your duty to your patient—it is your duty to your profession; and investigate in more than one direction. The fear comes to me sometimes that we are drifting too much into the mere investigation of the etiology of disease. I admit that the bold investigations in this line have been very instructive and interesting. And we are all now ready to acknowledge that diphtheria, scarlatina, tuberculosis and other diseases are germ diseases and Koch's common bacillus seems to present very strong claims to be recognized as an important factor in the production of cholera.

The uniformity with which certain parasites are found in connection with certain pathological conditions clearly establishes the fact that these minute creatures are either the product of these diseases or the exciting causes of them. Thus much valuable light has been thrown into dark places. But I believe that larger therapeutical knowledge is needed. We need more facts and less theories. We need more exact observations of a clinical and therapeutical character. It has been truly said that the place to study disease intelligently is at the beside.

Do not be dazzled by the brilliancy of those wonderful investigations of Koch and Pasteur and run off in these lines, but keep up your interest in clinical observation. There are other fields lying untraversed before you, and not least among them are Pathological Histology and Chemical Therapeutics—if you will permit the phrase.

We want to know not only what causes the disease but what can prevent and destroy it; and not only what can destroy it, but how it does it, what is its modus operandi, and what is its action on the various tissues.

Again, I would say do not drift into disregard of human life. Human life is the most sacred earthly treasure. Don't take it upon yourself to decide in any case that death is better than life,—that a certain life is valueless. We cannot know of what value a life may be. We cannot know what may hang even upon a few hours of life. It is our business to heal and relieve disease and prolong human life to the very utmost.

Scientific knowledge is of immense value, but we buy it too dearly when we buy it at the expense of

a brother's life, even at the expense of a few fleeting hours of a painful existence. His life is not ours, it does not belong to us, and we have no right to sacrifice it, even though we may flatter ourselves that it is for the good of the many.

May I say, too, do not drift into harshness and want of feeling for the poor patient. Many an eminent physician has owed his success in life to the lessons he has learned in the lonely garret of his poorest patient.

Look above the paltry fee, and remember that you are dealing with a brother, and a kindly word and a kindly deed will leave sunshine behind you that will help marvelously to effect the cure which your prescriptions aim at.

And, if you will bear with me, I will go a step further and say, do not drift into materialism. It is very popular now, especially perhaps among Medical men. Your studies, which for years you have been prosecuting, have necessitated the investigation of matter and its properties, and one is liable in this pursuit to fall into the error of thinking that matter is all that there is in man. And this, too, in the face of the fact that every practitioner admits that in numerous instances he recognizes the necessity for the treatment of mind (whatever he means by it) more than the treatment of the body. Schiller said "I abandoned surgery for philosophy and poetry, because I found the wounds of the spirit were so much more grave and numerous than those of the flesh."

You will soon stand in sick rooms where you will seem to stand to the sick man and his friend next to the eternal God, and your opinion will come with a weight second to none on many matters. It is a grave and responsible position to occupy, and I intreat you not to let fall crude conjectures on the ears of the dying.

There is such a thing as Theological and Psychical quackery as well as quackery in other lines. Remember that the phenomenon of cerebration is one of the most subtile and profound that we have to deal with. Localized cerebration has been advanced by materialists as an unanswerable argument in favor of their theories. The seat of intelligence, being in the convolutions of the cerebrum and memory has been located in the Fissure of Sylvius near the Island of Reil.

But as it is yet a disputed point whether the bacteria of tuberculosis is the cause or the effect of the disease, so it is certainly not yet proven that the Fissure of Sylvius is not merely that portion of the brain where the mind receives, communicates and expresses the recollections of subjects and objects. If memory is merely the substance of the brain, how comes it that in old age when, since youth the grey and white matter have frequently been renewed, we retain most vividly the memory of childhood's years. Can the substance of the brain store up a life-time's experience and produce it at will?

If so, at the *will of what*. Surely the will of something superior to itself or it could not control it. Surely a force above itself is needed to throw this mind-cell shuttle back and forth to the Fissure of Sylvius in its proper time and place. I take it that it certainly is not yet proven that the brain is not like the hand—a mere instrument to do the will of the superior intelligence which acts upon it and through it. Don't let us be afraid of truth in whatever way it comes, and whatever hoary or modern notions it may overthrow,—but let us be sure it is truth; let us be sure it is not mere prejudice and imagination.

If I show a man my watch (to use that old illustration of Paley's) and he should say, "who made it?" and I answered, "no one—it made itself;" he would reply, even if he were the most pronounced materialist: "Why, that is folly or madness." So if I point to Orion with his eighty-one stars, and show that they move with a regularity and precision that puts the finest watch to shame; if I point to the human body with its marvelous mechanism, to the human brain with its lofty and transcendent powers (the greatest of all creative achievements) and ask who made them, and he answers "they had no maker—they made themselves,"—though the popular voice to-day may applaud and say: "Behold an advanced scientist and mighty thinker,"—have I not just as good ground as he had before to say, why, that is folly or madness. Ignorance certainly has its dangers, and so I believe every study has its peculiar dangers, and this is one that will meet you every day. I therefore plead with you to be on your guard, and not drift into the utterance of unproven and ill-founded materialistic phrases. You may say perhaps: "these' are trifles of which you speak." It is related of Michael Angelo that in explaining to a visitor at his studio what he had been doing at a statue since his previous visit he said: I have retouched this part—polished that—softened this feature—brought out this muscle—given expression to this lip—and thrown more energy into that limb." "But these are trifles," said the visitor.

"It may be so," replied the great artist, "but trifles make perfection, and perfection is not a trifle."

So we trust that these trifles will not be unheeded, and that you will all climb to the highest seats among men and among physicians, and that truth and fame will entwine their garlands around your brows, and prosperity and success scatter their roses in your path.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 5th, 1886.

Unusual Ovarian Tumor.—Dr. WM. GARDNER exhibited an ovarian tumor, and briefly narrated the case. The woman, aged 48, long married, sterile, consulted him six years previous for a moderately large cystic tumor, with solid nodules in the pelvis. Menstruation was increased. She was advised against operation, but saw another surgeon, who explored through abdominal incision, but apparently did not otherwise interfere, as she appeared some time afterwards unchanged in her condition, except for the scar, with a ventral hernia. Dr. Gardner then lost sight of her till two months ago, when she was admitted to the Montreal General Hospital and he was asked to take charge of her. She then related that a few months after the exploration she began to enlarge rapidly, and pressure symptoms became so distressing as to induce another surgeon to tap. This was necessary many times, but four months previous to admission the tumor ceased to enlarge. The lower part of the abdominal walls and lower limbs were œdematous. The whole abdomen, except the upper part, was elastic, indistinctly fluctuating, and dull on percussion. The hypochondriac and epigastric regions were tympanitic, but gave distinct wave-fluctuation. Menstruation had ceased eight months previous. Patient was eager for operation, although made fully to realize its serious character, and it was decided to give her the chance, though small. There was universal very firm adhesions to parietes, intestines, bladder and everything in the pelvis. The bladder was adherent and drawn up at least six inches over the tumor. It was separated without difficulty. Intestine was wounded twice during the operation, but promptly sutured. Above the tumor was an encysted collection of peritoneal fluid, with the intestine floating on it. Under this lay a large, very thin, translucent cyst attached to the tumor. Hemorrhage, although not excessive, was free enough, when aided by the long severe operation, to so exhaust that it soon became apparent that the patient's chances were almost nil. The base of the tumor contained uterus and a large mass of calcareous matter and myomatous nodules. It was included in a Tait's wire clamp, constricted, and then amputated. Bleeding being nearly arrested, the abdomen was closed, with a drainage-tube inserted. The woman died half an hour after being put to bed. The tumor was a multilocular cystoma, the large cysts containing large masses of papilloma, nodules of which were also found on the parietes of the abdomen. The mass of calcareous matter measured 3½ × 2 × 1 inches.

Small fragments of transparent rock-crystal removed from the Cornea.—Dr. BULLER exhibited the crystals and related the case. They consisted of three small fragments of rock-crystal. The largest of the three is of a triangular or conical shape, about 1½ millimetres in length; the others are of smaller size. He removed them from the cornea of a marble worker, where they had been lodged for several days. They had been projected into the eye from the chisel of another workman as the young man who received the injury was passing by. He came to him about an hour later, and he found two small incised wounds of the cornea lying parallel to each other, about one millimetre apart, and nearly opposite the lower margin of the pupil. After a careful scrutiny with focal illumination, he failed to find any foreign body, but prescribed a solution of atropine and cold water compresses. The patient returned for inspection from day to day, but despite the treatment the eye became more and more inflamed. The other one he had lost by a penetrating wound of the eyeball some months previously, so that he was led to explore the little wounds with a fine cataract needle. By this means the steel point coming in contact with the gritty particles instantly gave unmistakeable evidence of their presence, though wholly invisible to ocular inspection. On moving one of the particles some aqueous humor escaped, showing conclusively that it had penetrated partly into the anterior chamber, and, from being invisible, would be extremely liable to be pushed into the anterior chamber during any attempt at extraction. The eye was then put under the influence of cocaine, and the blade of a broad needle was passed through the cornea (of course penetrating the anterior chamber) in such a way

that the part containing the foreign bodies rested upon the flat surface of the transferring blade. It was an easy matter then to remove the particles with a fine cutting needle, and without the slightest chance of their being pushed into the anterior chamber, a mishap which would have led to disastrous consequences if it had been permitted to occur. The eye, once freed from the source of irritation, made a rapid and satisfactory recovery.

Dr. JOHNSON exhibited the following specimens :—

Sacculated Kidney from Renal Calculus, removed from a patient who died of heart disease, with thrombosis of right middle cerebral artery. Symptoms of blood and pus in urine observed before death. Right kidney enlarged to double usual size, distended by fluid, renal tissue destroyed, and organ converted into series of cysts containing fœtid ammoniacal fluid, tissue debris and uric acid granules. At inferior, extremely small parts of renal substance remaining; in calices, several small uric acid calculi. This portion of kidney alone communicated with ureter.

Fatty Degeneration af Heart—Aneurism of left ventricle perforating into Pericardium—Aneurism of Abdominal Aorta.—Patient was 75 years old. At autopsy, pericardium contained eight ounces of fluid. A small amount of firm clot adherent to anterior surface of heart on dissection. Valves healthy; substance showed extensive fatty degeneration. In left ventricle, a pouched sac size of walnut found in wall of septum, bulging towards left ventricle. This communicated directly through a small opening 2 mm. in diameter, with lacerated external opening of large size in septum, the orifice situated to right side of anterior coronary artery. Sinus about orifice infiltrated with extravasated blood; and in same patient, extensive atheroma of aorta, and in abdominal aorta, just above bifurcation, a fusiform sacculated aneurism rising from right side of vessel; extensive fatty change of intima at this point, with formation of cholesterine. The sac contains a soft dark-clot, non-adherent.

Dr. GEO. ROSS said this patient had been suffer- from cellulitis of the arm, and alarming symp- coming on, he was asked to see her. She ome suddenly pallid. On examination, he almost pulseless and extremely feeble. urmur was to be heard over the lower lso over the tricuspid area. The murmur could be heard over the apex, but not at the base. The House Physician said she had had no murmurs before. Dr. Ross said that it was remarkable the time she lived after the grave symptoms set in—from 2 a.m. till 9 p.m. It was no doubt due to the small amount being poured into the pericardium. He believed the bruit to be caused by the current in the aneurismal sac containing clot.

Dr. WILKINS said it might be due to the blood poured out with each systole through the rent.

Dr. ROWELL exhibited the *Lumbar Vertebræ* of a patient, the immediate cause of whose death was *Miliary Tuberculosis*.—The following is the history of the case: Mrs. A., aged 46, married, admitted to the Western Hospital under the care of Dr. Armstrong, complaining of intense pelvic and lumbar pain. The patient was comparatively easy if quiet, but the pain was much exaggerated on walking. On examination, found fixation of the lumbar vertebræ, which would remain curved strongly forwards (lardosis) in any position in which she was placed. A plaster-of-paris jacket was applied, which gave her perfect relief for some weeks, when she began to complain of chilly sensations, accompanied by a high temperature, going up to 104° and 105°, without, however, any distinct rigors or profuse sweating. Moist sounds were heard over both lungs, back and front. She now became hectic, suffering from anorexia, with rapid emaciation, and finally died about three months after admission into hospital. At the post mortem, found both lungs completely filled with miliary tubercles throughout their entire extent. The spleen and kidneys also contained a large number of miliary tubercles, especially the spleen, which was completely studded with them. The heart and liver were fatty. The 2nd, 3rd and 4th lumbar vertebræ were removed, and found softened by an inflammatory process in their cancellous tissue, where there were small pus cavities. The cancellous tissue of the 3rd lumbar vertebra was broken down to a considerable extent, and there was pus found between the dura mater of the cord and the bone in the spinal canal of that vertebra. It was noted that the intervertebral substances were healthy, the disease being confined to the cancellous tissue of the bodies of the vertebræ.

Drs. PERRIGO and TRENHOLME, under whose care this patient had been at different times, also made some remarks.

Dr. ROWELL also showed—

Ovarian Tumors from a case of Double Ovariotomy—Mrs. G., aged 27; family history negative; married three years ago, never pregnant. For the last two and a half years has suffered a great deal from abdominal pain, not particularly exaggerated at the menstrual periods, which occurred regularly once in 24 days. She was not herself aware that she had any localized enlargements. The operation was performed in the month of February last by Dr. Armstrong, in the Western Hospital. The cyst on the right side was found to be unilocular, about the size of a fœtal head, and containing serum. Its walls were strongly adherent to the brim of the true pelvis by their under and posterior surfaces, which made its removal very difficult, and it was followed by a considerable oozing of blood which, however, was controlled by hot sponges. The cyst on the left side was about the same size, also unilocular, and contained serum. It was slightly adherent to the omentum, but was removed with much less difficulty than its fellow. The patient recovered without a bad symptom.

Progress of Science.

CLINICAL LECTURE.

BY DR. ROBERTS BARTHOLOW, of Philadelphia.

INDIGESTION.

I bring before you, gentlemen, a case that affords some very interesting points, and that gives me the opportunity of urging upon you the importance of attention to dietetics in the treatment of disease. In the first edition of my text book on materia medica, I devoted considerable space to the discussion of this subject, and my subsequent experience has convinced me that its importance was not over-estimated. I believe that we can do a great deal, not only in dyspeptic disorders, but in various chronic diseases, by noting and using this important weapon. In is a well-known fact that by a rigid adherence to a dry diet we can accomplish oftentimes wonderful results in cases of chronic exudations, especially of a fluid character.

Now, this woman before you, had been for some time accustomed to use largely a starchy diet, she consumed very little meat; in time digestive disorders were developed, she was unable to properly digest this excess of starch, and acid dyspepsia was the result. She, in consequence, suffered from anæmia, all mucous membranes were pallid and her nutrition was much impaired. In this form of indigestion there is a fermentative process established as the result of which we have the formation of acetic acid and carbonic acid gas. The indigestable article may be fat, when we will have the liberation of fat acids, when, in the eructations, we will have the characteristic disagreeable odor and taste of butyric acid. If the eructations are simply of carbonic acid gas, they will be inodorous, hence we have an easy means of diagnosis between saccharine and fatty indigestion. Now, in such cases, all remedies will be absolutely useless without a rigid regulation of the diet; we must make a careful study of the diet from the point of view of the various disorders. In this case, as soon as the diet was modified so as to exclude the offending articles, the patient commenced to improve, but as sure as she forgot her caution and used that food, which she preferred, her bad condition became aggravated. In addition to regulating the diet, I ordered a mixture of carbolic acid, creasote and bismuth, suspended by glycerine. The glycerine here serves a double purpose, first by arresting the fermentation (for it is, in itself, a good remedy for flatulency), and, secondly, it serves to hold the other drugs in suspension. This is an excellent combination for stomachal and intestinal fermentation.

CHOREA.

This boy, as you see, has choreic movements of all the voluntary muscles of the body; the heart is not involved in the choreic movements, nor is there any disease of that organ. This is an important point to note, since there has recently been much discussion in reference to the cardiac origin of chorea. Jackson, of London, advances the theory that chorea is due to minute emboli in the corpus striatum, but I think the majority of cases are against his view. This boy belongs to a neurotic family, and while he has never had rheumatism himself his family presents a well marked history of this disease. Now, I do not think that the importance of a neurotic temperament can be over-estimated as an etiological factor. I will not dilate further on the symptoms of the case, as they are apparent to you, but will proceed to the treatment. The experience of Guy's Hospital, London, seems to indicate that rest, seclusion and nutritious diet are the sheet-anchors in treatment, in nearly all cases these measures did good and in some cases they arrested the disease. Such children should be removed from school, where they are annoyed by the attention which their disease attracts from their companions. All sources of excitement must be avoided, and while giving them plenty of exercise, they must be screened as much as possible from the public observation. As for drugs, if they are anæmic, the ferruginous preparations are called for; this boy is not anæmic, and I think iron would do him very little good. Since Harley, of London, has recommended succus conii so highly, Squibb, of Brooklyn, has kept on hand a large supply, and this drug seems to do good in many cases. Gelsemium is also good, but I think no single drug has so much in its favor as arsenic. In this case we will give Fowler's solution, three minims thrice daily, in combination with the fluid extract of gelsemium.

Here we have another case of chorea in a little girl, who has been so afflicted for three or four years; she also comes from a family where the neu-

rotic temperament is strongly marked. At times she gets much better, almost well, then the disease recurs with all its former vigor. There is more anæmia here than in the latter case and the appetite is capricious. We will carefully regulate the diet and give the girl tincture of calumba, one drachm thrice daily, and Fowler's solution three minims thrice daily, this she will take before meals and after each meal she will take one of the officinal pilulæ ferri iodidi.

LABARYNTHINE VERTIGO.

This is a curious case of vertigo that came on suddenly some days ago, associated with impairment of hearing. Let us remember that the semicircular canals have something to do with our position, they play an important part in the preservation of the position of the head in space. In Meniere's disease, we have hemorrhage or a sudden effusion into these canals, and the patient may even fall unconscious. When consciousness returns there may exist an inability to perform voluntary movements. From this grave form there may be all grades of severity down to the simple form that we have before us. When we have presented to us a case of vertigo, with impairment of hearing, that continues, we must always look to the condition of the auditory canal, and we will do well to enlist the services of an aurist. Charcot first called our attention to the great benefits to be derived from the use of quinine in these cases, and before that time we were able to do but little to relieve them. Now we have several remedies, all of which have somewhat the same action as quinine. We thus can use quinine, salicylic acid or salicin. All of these drugs, when used in large doses, produce more or less buzzing and vertigo. This fact was well illustrated sometime ago, in the case of a clergyman, who was undergoing trial on a charge of drunkenness; his defence was that he had just taken a large dose of quinine before the occurrence of the actions for which he was being tried. I was called as an expert witness, and was asked whether quinine could produce such phenomena as he presented, which were closely allied to those produced by alcohol. I answered in the affirmative and it was chiefly on my evidence that he was acquitted. He had taken a large dose of quinine, but he had also taken a large dose of whiskey, for his physician had ordered him quinine and whiskey, which, to avoid publicity was put into a black bottle, labelled *poison*. In these cases quinine seems to antagonize the local morbid process, especially if it be of the nature of effusion and congestion of the mucous membrane. Quinine causes this buzzing because it occasions a condition of anæmia of the parts, it lessens congestion and so favors absorption. We will order it here, but it must be given in large doses, not less than five grains thrice daily, and, if the patient will bear it, more good will be derived from ten grain doses continued for three days, then five grain doses for the balance of a week, when its use should be suspended, to be resumed if necessary. I would repeat to impress upon you the importance of carefully inspecting the ear. Remember that this is not truly Meniere's disease, though the name is sometimes applied to it. These cases are much milder, and the term should be strictly confined to those cases where there is hemorrhage, unconsciousness and extreme vertigo.

BRIGHT'S DISEASE.

I have frequently called your attention to the pre-albuminuric stage in chronic kidney disease, which I deem to be a matter of great importance. In such a state the patient will pass large quantities of pale, limpid, watery urine, of low specific gravity: she will be compelled to rise at night to urinate, will complain of rather persistent headache, thirst, dyspeptic troubles and tumultuous and irregular action of the heart. In fact, all the usual signs of fibroid kidney will be present, yet, upon examination you will fail to find the slightest trace of albumen. The vast majority of cases will present albumen, yet you will occasionally meet cases without it, and it is of importance that you should remember this fact, else you may be misled in your diagnosis. This woman, before us, has had fibroid disease of the kidneys for three or four years, yet even now there is not more than five per cent. of albumen in the urine. She has had some œdema, but never much; the arteries are hard and rigid, and we can detect evidence of high tension in the vessels. We have reason to believe that changes in the vascular system precede the albuminuria. Her heart acts rapidly and this rapidity is increased by slight exertion: she gets out of breath, but has not true renal asthma. She suffers with headache and dizziness, which I believe to be due not to true œdema of the brain, but rather to a greater or lesser increase of fluid in the peri-vascular lymph spaces, which may occur without œdema of the brain. She has also digestive disorders.

Now, I have a very strong conviction that two classes of remedies are indicated in this case. The first to relax, vascular tension, which can be best accomplished by the use of nitro-glycerine, not, as is usual, in pill form, but in solution. To secure the beneficial effects of this drug it must be carried to the point of its physiological manifestations. We will here order the centesimal solution that is one drop of nitro-glycerine to one hundred drops of alcohol, and of this solution we will commence with one minim thrice daily and add one minim to each dose until it produces headache, frontal or general, coming on about fifteen minutes after the dose and lasting for a few minutes. The physiological effects are evidenced by this headache, flushing of the face and increased action of the heart, and until such effects are noted the drug is doing no good. The dose required will vary much in different cases. Three minims will suffice in many, in a few five will be required, and I have now a young lady under my care who is taking

eighteen minims at a dose. There is a very great variation in the susceptibility of different individuals to the drug. The second indication is to check the overgrowth of fibroid tissue, and this I believe can be accomplished by the use of chloride of gold and sodium. For many years I have recommended this drug, and my faith in its efficacy is stronger now than ever. I am quite sure that I have seen cases cured by its use. The dose to commence with is 1-20 of a grain, increased to 1-10. I prefer to give it in pill form, though it may be prescribed in solution, if preferable to the patient. In chronic fibroid kidney, the question of diet is of paramount importance: large solid meals are injurious. The diet should consist of milk, animal broths, but few vegetables, and those of a succulent nature, and some fruit. The patient should dress warmly, avoiding, especially, exposure of the feet and ankles, avoiding vicissitudes of temperature, preferring a uniformly high to a low one. Remember that in many cases there is a syphilitic history, I believe in at least ten per cent, and in such cases with the remedies already indicated, I would combine the corrosive chloride of mercury in doses of one-fortieth of a grain.

PECULIAR CASE OF LEAD POISONING.

When I looked at this man's swollen hand, outside, a few minutes ago, I was struck with the resemblance it presented to a case of plumbic rheumatism. For several weeks his hands have been swollen as you see them, commencing in the right and extending to the left. The joints very much resemble the condition seen in lead-poisoning, but when we inquire about his trade, we learn that he is a shoemaker; now how could a shoemaker become poisoned by lead? When we inquire critically about the tools of his trade, we learn that the tacks which he uses are coated with lead, and that he is in the habit of keeping them in his mouth. When I look at the gums, I cannot say that I see a positive blue line, but they possess a bluish grey tint. These two facts and the absence of signs of any other diseased condition, incline me to the view that he is suffering from plumbism. In these doubtful cases, the correctness of the diagnosis can be determined by the results of treatment. The iodide and the bromide of sodium both form soluble combinations with lead, while the bromide will also afford some relief to the uneasiness occasioned by the swelling. He will also take sulphuric acid lemonade, and the contents of his bowels will be kept soluble by sulphate of magnesia. The joints will be kept at rest, and if he can afford it, he will take sulphur baths.

If our diagnosis be correct, he will feel worse for a day or two, when he will commence to improve. In these doubtful cases we can often settle the question by urinary analysis, when, if it be lead-poisoning, we will find the salts of lead.

COUGH.

The following article, by J. Milner Fothergill, M.D., Edin., appears in *The New York Medical Record.*

In this day of careful physical examination of the thorax some other matters have almost dropped out of sight. The old physician who recently declined the loan of a stethoscope by a young clinical assistant for the diagnosis of pneumonia, saying, "Thank you, young man; but I thing I can detect pneumonia without a stethoscope! could no doubt have taught that youth much that would be useful to him. A stethoscope is a capital instrument in the hands of a man who knows its use; but it has undoubtedly drawn attention away from what may be termed rational consideration of the chest, and a judicial handling of what the patient has to tell, which often furnishes a clew to the treatment; a matter on which sometimes the stethoscope is silent. It is not that physical examination is not a most valuable means of acquiring certain information; but that this other information is apt to be overlooked or under-estimated; and thus a good proportion betwixt the two means of examination is lacking.

A cough is a forced expiration to eject some offending materials from the air-tubes just as a sneeze clears the nares. But suppose the offending or irritant matter cannot be ejected, what, then, is the value of the cough? Nothing whatever. There is then much useless cough, as well as useful cough. Other matters than something in the air-tubes may set up a cough. Thus we find cough equally present when there is some phlegm in the air-tubes; when there is a mass of tubercle undergoing softening; and in the pulmonary congestion of mitral lesion. A crumb in the larynx will provoke violent cough; and so will other laryngeal irritation. All know the brazen, trumpet-like cough of aneurism of the aortic arch pressing upon the recurrent laryngeal nerve, a cough closely simulated in character at times by a neurosal cough. This last was so marked in two girls that their cough told when they were on the hospital premises. It is needless to say their departure was always expedited. Then, cough in the form of "hawking" is exceedingly common in pharyngeal disburbance.

There is, too, cough unconnected with the air-passages and the respiratory organs. There is the well-known cough of pregnancy, the "nine-months" cough." There is ear-cough said to be connected with the tympanic branch of the glosso-pharyngeal nerves, set up by irritation in the ear. There is the cough of gastric irritation, common with alcoholic indulgence. In one case, at least, known to me, diarrhœa always set up cough. Cough of the "hemming" character, often misinterpreted as the short cough of early phthisis, is found com-

monly in girls at or after puberty, linked with ovarian or spinal irritation. It is clear, then, that cough has various causal associations.

The importance of reflex cough need not be considered here; nor yet the means by which it may be relieved. In all reflex actions the bromides suggest themselves at once. If the exciting cause can be dealt with, then the resultant cough is relieved.

It is rather the intention here to consider cough from its clinical and therapeutic point of view, and to see what indications it furnishes us for treatment. For instance, in "heart cough," *i. e.*, where the cough—a hard dry cough—is set up by congestion of the pulmonic or lesser circulation by some dam or block at the mitral ostium, sedatives are most undesirable.

Such cough is most commonly found in a young girl with a mitral lesion. One such case I well remember when the resident medical officer of the Leeds Public Dispensary. The girl, a child of twelve, had a mitral regurgitation—an injury inflicted upon previous to her coming under my notice. Digitalis and iron improved the general condition, and with it the amount of cough; but still the child, a bright neurosal creature, coughed considerably. She ceased to attend, but some weeks later her mother came and made a frank confession to this effect: "Doctor, I thought the girl ought to have some cough medicine and when I asked you for it, you always refused to give her any. One day I came when I knew you would be out, and got one of your assistants to grant me some cough stuff. It acted like a charm; but she soon fell off and lost her appetite, and could not get about; and now there is dropsy in her ankles. She is so bad I want you to do what you can for her." Appropriate treatment soon restored the child to her ordinary condition; but her mother did not hanker after cough medicine after this experience. This case illustrates vividly the disastrous effects of allaying the cough when due to pulmonary congestion. For a little time it gave relief, but the after condition was worse than the first. So much for the indication afforded by the cough under one set of circumstances, the case just mentioned by no means standing alone.

The consideration of "useful" and "useless" cough may now engage our attention. It is a matter involving the greatest thought, and well deserves our best consideration. We will take cough in bronchial cases first. There is in the early stages of acute bronchitis much useless cough set up by the dry mucous membrane, and the means for its relief have been set forth in a preceding article ("Bronchitis, Acute and Chronic"). Then it was said there existed no particular objection to opium, which gives great relief. But in such cases the sedative is combined with other agents of a relaxant character, as tartar emetic or aconite. As soon as free secretion comes the cough changes its character. It is no longer the dry harsh, shaking cough of ineffectual effort, raising nothing, but becomes the less painful, truly expulsive cough of successful effort. Now, what we are required to do is to give stimulating expectorants, and so help and improve the character of the expulsive cough. There is usually at this point no indication for opium, and none is required unless it be a little at bedtime in certain cases.

It is rather in bronchitis with little expectoration and much bronchial irritation that the question of decision taxes our best mental energies. In some cases the rest at night is broken by irritant cough, and then the question arises of the lesser of two evils. If the opium arrest the secretion, and so render it tougher and more difficult to get up; if the opium brings lethargy to the liver, impairing the appetite, and locking up the bowels, still it gives the patient rest. Consequently it may become necessary to administer it. But it should be given with benzoic acid in compound squill pill and a little podophyllin or watery extract of aloes to counteract its undesirable effects in the alimentary canal. And by such combination no doubt the maximum of good with the minimum of bad effect can be secured. Number of chronic bronchitics under my father's professional care took such a pill every night for years without apparent injury, while it added greatly to their comfort. (I refer to my father's experience in these cases because I served under him and saw his practice, my own experence of general practice being but short). But granting all this, the less opium in diseases of the respiratory organs the better—as a broad rule Sometimes some chloral, or bromide of ammonium with tincture of hyoscyamus, may seem indicated rather than opium, or even camphor may be the best agent to employ in certain cases. But, in a general way, opium (in such pill-combination as has just been suggested), with some alcohol at bed time as a "night cap," *i. e.*, whiskey or brandy and hot water, taken on getting into bed, is the best practice with chronic bronchitis. One great matter there is in such cases, never to be lost sight of by the patient, and that is to avoid passing from a warm sitting-room to a cold bed-room; the bedroom should also be warm. Another is to have the bed warmed by the old-fashioned warming pan, or perhaps better still, by a hot water bottle, which can be pushed down to the foot of the bed (so as to keep the feet warm) when the patient gets into bed. This matter of an equable temperature is very important, and many bronchitics toast themselves well before going upstairs to cold unwarmed bedrooms, where they cast off their day clothes, don a cold night shirt or gown, as the case may be, then kneel down and say their prayers, and get into a cold bed. It is needless to say that no medicinal course can be successful in a case where this goes on.

Important as is the matter of cough and its indications for treatment are in chronic pulmonary phthisis is even still more important. There is the cough in the night breaking the sleep, there is the cough in the day shaking the sufferer; both ob-

jectionable and undesirable, and requiring to be dealt with. The circumstances under which cough is developed in pulmonary phthisis vary. Sometimes mere apex consolidation is accompanied by cough. Where there is bronchial implication and localized bronchitis in the affected area this can readily be understood; but at times there is cough without the moist rales indicative of this condition. We are compelled here to suppose some irritation of the pulmonary fibres of the vagus, which is transmitted to the respiratory centre, leading to discharge producing the modified inspiration and expiration familiar to us as "cough." Belladonna is said to exercise a decided influence over these fibres, and so is indicated in such condition. (By this property belladonna, or atropine, is a desirable addition to an opiate for a night-pill.)

It has also been claimed for gelsemium sempervirens that it is useful in such cough by its action upon the nervous mechanism of the respiration. Bromide of ammonium suggests itself at once for the relief of such cough, from the known utility of the bromides in the reflex trouble.

One curious point there is about cough in its relations to static pulmonary consolidation, and that is this. Whenever a person possessed of a patch of consolidated lung has also the liver upset then the irritation in the said patch with resultant cough is marked. No cough medicines nor antispasmodics do any good; but agents which act upon the liver, as a blue pill at bed time (or other mercurial), and a dose of sulphate of soda next morning produce a distinct and unmistakable effect in lessening the cough. Consequently, when a patient complains of troublesome cough and an area of consolidated lung is found, it is often well to inspect the tongue and inquire into those subjective sensations experienced when a person is bilious or "liverish." From its known effect upon the liver, opium not only gives no relief, but positively aggravates the condition.

When a tubercular mass, or a proportion of the consolidated area commences to soften—probably by the proliferating cells being so crowded on each other that they die; possibly by the appearance of bacilli on the scene—then we can readily understand the oncome of cough, and often severe cough. The dead mass is an irritant—like the thorn of Van Helmont—as a process of ulceration cuts it off from the surrounding lung-tissue; and during the time the process is going on there is distinct local irritation setting up cough. There is, too, hectic fever, with nocturnal pyrexia and night-sweats. In this condition it may become necessary to add some opium or morphia to the mixture of quinine and phosphoric acid so much in vogue for its relief; and whether any sedative must be added or not, and, if so, what quantity, is a matter to be decided by the merits of each particular case. That some morphia is unavoidable to procure sleep in such condition goes without question; but it must be guarded by the additions suggested in the article on "Pulmonary Phthisis." Such a condition is like a specific fever, or a storm at sea, in that it comes to an end sooner or later, and if the organism can be kept going, or the ship afloat till the end comes, all is well. Of course if there be but one softening patch the irritation set up is smaller than when there are several such morbid areas. In the latter case, opium in the day may be unavoidable; and its drawbacks must be met and got rid of, or neutralized, by such wit and skill as the medical attendant can command, either in himself or some consultant of more experience or deeper thought. Above all things, keep up the powers by such food as the patient can take. The fever usually brings with it thirst. Then let the patient have cold beef-tea, with baked flour in it; malt extract, with effervescing water; milk, with mineral water or whey; or milk diluted with water and some Mellin's food added; and good home made lemonade, with a fair amount of acid and sugar or malt extract in it. Rice water, or barley-water or tamarind-water may be relished. Grapes and the juice of fruit are excellent. Alcohol may, too, be indicated. Sometimes it is neck or nothing. The patient must be heavily dosed with opium to allay the paroxysms of cough, aye, and there is something more than cough, viz.: the danger of hemorrhage from the ruptured bloodvessel in the softening area, brought about by violent effort at cough. The poor patient is like a soldier with bullets flying over his head; if he escapes one, the other hits him. The patient is passing through a period of acute perils; perhaps rather he is like a canoe shooting rapids studded with rocks; much, very much, depends upon the boat-man's skill and experience; something upon luck—and the patient's luck is the luck of a good constitution! If the softening areas be numerous and extensive, then the prospect of escape is small, and the skill of the steerer will be gravely taxed. In spite of everything that skill and assiduous attention can do or accomplish, the case may go on from bad to worse unto the inevitable end.

But, in my own experience of phthisis, cough has not been so very prominent a matter as to require treatment in the day except in a few instances. It is not common for the consumptive to be shaken by racking cough requiring opium in the day. And on enquiring of an experienced sister at the hospital, who has watched the practice of many physicians, including the late Dr. Peacock, she informs me that my personal experience is in harmony with that of other physicians at Victoria Park Hospital. It is at night that cough is prevalent, and the use of opium in combination with other agents, to procure a good night for the phthisical patient, is a matter upon which there is a general agreement.

When there is one or more cavities present the use of opium is not effected by the fact. Indeed a cavity is a matter of little moment one way or the other, therapeutically. Of course the patient is no better for having a cavity, but the question is, is he any worse? Patients with cavities die,

certainly, and patients with cavities leave the hospital very greatly benefited by their stay. As to question of cough and its treatment, a cavity counts for nothing; the cough certainly may be connected with its contents, or perhaps the condition of its wall. But the fact of the patient being in the third stage of phthisis (following the classification of Pollock in his "Elements of Diagnosis in Phthisis") does not effect the treatment.

Finally in dealing with cough the physician must observe and reason upon the cause of the cough, what it accomplishes, and how it affects the patient before proceeding to deal with it. Some cough is useless because ineffective, and needs some stimulating expectorant to render it efficacious—a very common affair; some cough is useless from every point of view, and so requires a sedative; and here the physician must decide in each case which is the lesser of two evils—the cough or the sedative.—*London Med. Record.*

FEEDING BY RECTUM.

By W. Julius Mickle, M.D., M.R.C.P. Lond., in *The Practitioner*.

There are many cases in which rectal feeding is beneficial; there are others in which it may become necessary for the saving or the lengthening of the patient's life. But I have no wish to unduly extol the rectal method of feeding, or to suggest its use when the more natural methods are feasible and effective.

The cases with which this paper is concerned may be spoken of as in several groups, loosely associated, for the moment, with reference to their suitability for the use of nutritive enemata.

Thus we may bring together cases, such as cut throat, inflammation of throat from the swallowing of caustic substances, diphtheria, diphtheritic paralysis of the throat, severe stomatitis or quincy, post-pharyngeal abscess. Or, again, where the œsophagus is compressed. or cancerous or strictured; or in spasm, made worse by attempts to swallow or to pass a tube, such as spasm of œsophagus in cerebritis, and some aggravated cases of hysterical spasm. Laryngeal phthisis, or syphilitic (and other) laryngeal stenosis, with extreme dysphagia, may indicate and justify rectal feeding.

Another group consists of gastric and abdominal affections often associated with vomiting and severe pain on eating—affections such as cancer, ulcer, atrophy or severe catarrh of stomach; or dilatation of stomach, with severe pain and vomiting; or extreme dyspepsia and irritability of stomach; or obstinate vomiting with ovarian disease, or with hysteria, or of uncertain origin; some cases of obstinate obstruction of intestine and vomiting, or of ulceration or hæmorrhage of small intestine; tabes mesenterica; peritonitis; renal calculus with reflex gastralgia and emesis.

Still another group consists of cases in which nutritive rectal injections may be given in affections such as the anæmias, neuralgia, phthisis, or to supplement the work of the stomach where there is either general or digestive weakness.

There is another group of cases in which the use of rectal feeding is highly advantageous. It consists chiefly of cases of apoplexy, or of excessively frequent and severe epileptic convulsions; or, again, epileptiform seizures, or of severe apoplectiform attacks, with stupor and coma. Seizure of these kinds are to be frequently found in general paralysis, and in various local, in "focal" softening or hæmorrhage; in thrombosis, embolism, or the various local pathological sequelæ of these or of brain injury. In many of these cases the attempt to feed the patient by mouth ends in the food, whether liquid or solid, being inhaled into the lungs. Even the attempt to feed by stomach-pump, by œsophageal tube, by nasal tube, or by funnel—or, in fact, to in any way get the food into the stomach—is sometimes followed by severe dyspnœa and threatened asphyxia. But the danger to which I would now particularly draw attention is that the introducing of food by this route sometimes occasions vomiting; or vomiting may be present independently of the passing of any tube. Here, then, is a patient who is helpless, or in stupor or coma, or paralysed, or convulsed, or anæsthesic locally, according to the circumstances in each case. If food is now successfully placed in the stomach—and this in many cases is difficult, in some impossible—it may not be retained there, but being only ineffectually and partially vomited or eructated, may be at once inhaled into the air-passages, be drawn into the bronchioles and alveoli, increase the already existing pulmonary congestion, and, the patient being in a state of depressed vitality, and there being difficulty in the throwing off of secretions and foreign substances by the lungs owing to this, to the local engorgement of the parts, and to the feeble expiratory power at the command of the automatic mechanism—the inhaled and not expelled food may set up a rapid destructive form of lobular pneumonia, or even of lobular gangrene. Under these circumstances even the salivary and other secretions, if inhaled, appear to be harmful, and the lungs. and kidneys are congested for the time, albumen and even blood-cells and casts being often shed by the latter: It is unnecessary to insist upon the importance of rectal feeding in many of these cases.

Tetanus in another form of nervous disease in which rectal feeding is highly serviceable.

As I do not wish to deal with the present subject from the point of view which particularly offers itself to me as a specialist, I shall merely mention —and this only in order that I may not ignore it —the enormous usefulness of rectal feeding in some cases of insanity with refusal of food, if and when the passing of an œsophageal tube causes vomiting or severe dyspnœa, or with such insane persons as refuse food and resist being fed, when, by reason of their diseased state of brain, heart, or lungs, efforts and straining against the stomach-tube endanger life.

In all these cases rectal feeding is useful when food is refused, or if swallowed tends to get into the bronchi; or when the passing of a tube brings on vomiting or suffocative spasm; or when the food regurgitates or is vomited with likelihood of getting into the air passages; or when the resistance made by the patient endangers life, owing to the effects of effort upon frail but vitally important organs.

If, then, one *has* decided to feed by the rectum, the next questions are: What are the best forms of nutriment to employ, and what are the best special modes of manipulation in introducing the food into the bowel?

As to the former, the question of the best form of nutriment for use for injection, the older plan, and the one still most in vogue, is merely to inject fluid food and stimulants, not specially prepared, but in the form in which they are taken by the mouth. Beef tea, milk and brandy have been largely used for this purpose, and I have heard of arrowroot being so used in considerable quantities.

Some amount of stimulation can be attained by the use of the substances just named, and from them can be absorbed constituents which enable the nutritive powers better to utilize the stores of nutriment already within the system. But for true food purposes their value is apparently slight. As Dr. Sansom stated (*Lancet*, February 19, 1881) only a fractional proportion of the albuminous contents of nutritive enemata, as commonly employed, is taken up into the blood current to subserve any useful purpose of nutrition. This fact has led to many attempts to improve upon the ordinary nutritive enemata.

The use of various digestive substances with the food injected has been tried, and many experiments, as well as observations which have practically the bearing of experiments, have been made.

Thus M. Catillon fed two dogs for two months by rectal injections of eggs only. One, which received eggs only, lived with difficulty and lost weight; the other, which had eggs, glycerine and pepsine, kept well and kept up weight, but when the pepsine was omitted, he too lost weight and his temperature fell.

In further observations, firstly, meat, bread and potatoes were taken, then no meat for three days, and the amount of urea excreted and the bodily weight both fell; then for one week peptones of meat were taken and the urea and weight went up again; next, for four days enemata of peptones only, and the weight was constant and the urea proportioned to it; next, low diet, no meat or peptones, and urea and weight fell. For a sustaining ration he suggests about five oz. of saturated solution of peptone, and for nutritive enemata, peptone of meat (saturated solution at 19° C.), 40 grammes; water, 125 grammes; laudanum drops iii.; sodii bicarb., ·3 gramme (about 5 grains).

Czerney and Latschenberger, whose experiments were conducted on a man's colon, through fistulæ following gangrene of an irreducible scrotal hernia, found that while little benefit comes from raw material in the bowel, much improvement in health and strength results if substances are previously partly digested, as, for instance, if fat is emulsified, albumen reduced to a soluble state and starch converted into glucose.

Marchwald is rather a pessimist in this matter. From his observations on a case in which the anterior wall of a cæcal hernia had sloughed, he concluded that the colon does not convert starch into sugar, nor digest fibrin or coagulated albumen, though putrefaction occurred and peptones formed; nor absorb ready-made peptones or fluid albumen; while it absorbs water slowly, and a little peptone, especially that formed in the bowel itself.

On the whole, I conclude that the rectum and colon digest but little, and that, even when inverse peristalsis is set up, the action of the bowel upon enemata is chiefly absorptive. If so the food should either be introduced mixed with digestive substances, or else, before administration, should, in some way or measure, be digested and ready for absorption into the venules and lymphatics of the intestinal walls. Several methods have been devised to attain these objects.

Thus Dr. Leube gives three parts of meat with one part of pancreas, both finely minced and mixed with a little water. An addition of fat does not harm the digestion of the meat and pancreas when injected, but more than one-sixth of fat is apt to cause stool. Brown Séquard's plan is first to clear out the bowel by an enema of luke-warm water, and then by a wooden syringe inject into the bowel two-thirds of a pound of raw beef and a quarter of a pound of hog's pancreas. Repeat twice a day. The pancreas must be fresh, the animal recently slaughtered, the fat and cellular tissue taken away. The meat and pancreas must be very finely divided, and thoroughly mixed. M. Catillon's formula I have already given above; when speaking of his experiments; it represents a peptone of meat. M. Henninger gives a complicated formula for a peptone of meat by digestion of meat under HCl and pepsine. Slinger has manufactured a nutrient suppository, consisting of nearly pure peptones, made by digesting lean meat with the mucous membrane of the pig's stomach. Numerous new preparations are brought before the profession each year.

Defibrinated blood and solutions of desiccated blood have been used for enemata, and especially in America. Three years ago, when I was on that side of the water, and met some medical men in consultation in reference to a certain case, in which the question of feeding by rectum arose, I found that the medical attendant at once suggested a solution of dessicated blood, which is usually employed there, I believe, in the proportion of one to eight of water for injection. Fresh defibrinated ox or sheep blood appears to be considerably used in America for nutritive enemata, as Dr. Sansom was one of the first to tell us.

In his Lumleian Lectures, Dr. W. Roberts* states that "pancreatic extract is peculiarly adapted for administration with nutritive enemata. The enemata may be prepared in the usual way with milk-gruel and beef-tea, and a dessert spoonful of pancreaticus should be added to it just before administration. In the warm temperature of the bowel the ferments find a favorable medium for their action on the nutritive materials with which they are mixed, and there is no acid secretion to interfere with the completion of the digestive process."

In actual practice I have departed considerably from this plan of Dr. Roberts, preferring to inject food in the already peptonised form, and ready to pass from the bowel by absorption For enemata, therefore, I have used, in a slightly modified form, his method of preparing the food as if for administration by mouth. A thermometer being employed throughout, and either kept in the liquid or frequently introduced to test the temperature, a pint of milk with one-fifth or one-fourth pint of water is heated in a clean dish to 140° F. At that temperature, two drachms of Benger's liquor pancreaticus are added, and twenty grains of bicarbonate of sodium dissolved in a spoonful of water. The whole is put into a covered jug or dish, and kept near a fire for from an hour to an hour and a half, and still kept constantly at a temperature of 140° F. At the end of that time it must be thoroughly boiled for two or three minutes. Each step should be carefully carried out to secure scccess. Thus prepared, the food keeps for half a day or more. For convenience, I have given the process as for one pint of milk, but multiples of that measure may be prepared. In feeding by rectum, I prefer to keep to this peptonised milk solely.

The following, from Dr. Roberts, chiefly useful for administration by mouth, may be given by rectum also.

For peptonized gruel; wheaten flour, oatmeal, arrowroot, sago, pearl barley, pea or lentil flour, gruel well boiled, thick and strong, Oj; put in a covered jug, cool to about 140° F., add liq. pancreatici ʒ ss. Keep warm under a cosey for two hours, boil and strain.

For peptonized milk gruel, thick hot gruel, cold milk, equal parts. To each pint add liq. pancreatici ʒ ij—iij., and sodii bicarb. grs. xx. Keep warm in covered jug for two hours; boil for a few minutes and strain.

For a peptonized beef tea: half pound finely minced lean beef, water a pint, sodii bicarb. grs. xx.; simmer for one hour and half; cool to 140° F.; add liq. pancreatici ʒ ss. Keep warm under a cosey for two hours; occasionally shake. Decant liquid portion and boil for five minutes.

* *Lancet*, May 29, 1880, p. 828

CHOREA SUCCESSFULLY TREATED WITH HYOSCYAMINE.

In a clinical lecture recently delivered in the Pennsylvania Hospital by Prof. Da Costa (*Med. Times*, January 23, 1886), a patient was exhibited suffering from what Dr. Da Costa described as the worst case of chorea that he had ever seen. The patient was a boy about 11 years old, pale and weakly, and described by his friends as having always been nervous.

Four weeks before the date when he was admitted (on the 14th of December) he had an attack of acute rheumatism, which involved all the larger joints of his body. The rheumatism lasted about three weeks, but as it declined choreic symptoms began to be manifested. His hands and arms were first affected, and afterwards his legs.

When admitted, he was actually unable to walk; he was even unable to feed himself, and seemed in risk of starvation. He was wretchedly weak and emaciated. He could perform no co-ordinated movements with his arms or legs, and unless there was always somebody about to give him a drink of water and food he would have perished. This was not due to actual want of power in the muscles, but to the impossibility of performing any voluntary act requiring co-ordinated movements; yet when food was placed in his mouth deglutition was readily accomplished. When admitted he could not speak, he could not articulate a word. He could not put out his tongue, although he could open his mouth and move his jaws, but he could not ask for food. His expression was that of an imbecile, and he was reduced to a mere shadow.

At first his arms and legs were constantly moving, both sides being equally affected. No power of grasp existed in his hands, though sensation did not seem impaired. He complained of pain when he was pinched. The patellar reflex was normal, and not exaggerated. No marked change in the electrical reactions was observed. His pupils were very much dilated; his pulse was only 50 per minute, and rather weak; there was a systolic mitral murmur heard at the apex. These involuntary muscular movements did not continue at night when he was asleep. His urine had been examined but neither albumen nor sugar was detected. His bowels tended to constipation.

The ordinary remedies for chorea act slowly; arsenic, though one of the best of our therapeutic agents for this disorder, acts slowly: it takes time, and the loss of time here might be fatal. Dr. La Costa then recalled a case of tremor which he had seen rapidly influenced by hyoscyamine, the active principle of hyoscyamus niger. He concluded to try it here. He ordered him to take $\frac{1}{200}$ grain to begin with, a decided dose for a boy of his age; but, not finding any marked influence, he concluded that it would be advisable to increase the dose to $\frac{1}{100}$ grain, given three times a day. Now the effect was admirable. From the first few days the boy began to improve, and at this time he had

some dryness of the throat and wanted his mouth frequently moistened. He soon became brighter in his mind; he took more interest in what was going on; he moved voluntarily in bed, and tried to help himself to food. His voice also returned, and he left his bed and began walking around the ward. After this his recovery was rapid and uninterrupted. He has had no other treatment than the hyoscyamine, and he has now so much improved, though he is still somewhat pale, that he may be looked upon as having recovered. He can sit quietly; he has power over his hands, both in co-ordination and in grasp, although his grasp is still a little feeble. He walks and stands now without falling. His pupils are dilated, although not much.

The systolic apex-murmur persists: it is a chronic mitral regurgitant murmur. In every other respect the boy is nearly well.

Dr. Da Costa then referred to one or two points of clinical interest in connection with this case: first, some points which have nothing to do with the treatment; and, secondly, some which bear upon the treatment.

In the first place, this attack of chorea was clearly of rheumatic origin. It came on at the end of an attack of acute rheumatism. It is true that the boy was previously feeble and *ill*-nourished, and that he was regarded as a nervous child; but the association of chorea with rheumatism is too close a one for us to regard it here as a mere coincidence, You can generally trace, in a case of chorea, a strong rheumatic element, either inherited or acquired. In this form, before the patient has left his bed or his attack of rheumatism is clearly over, the chorea is manifested, which makes the connection still closer. Now, it has been thought that there is an embolic process at work in the smaller blood-vessels of the motor centres in the brain and spinal cord; small vegetations which are formed upon the valves are washed into the arteries supplying the motor tracts especially the corpora striata, and the subsequent disturbances of nutrition gave rise to the irregular, unco-ordinated muscular movements. This is a plausible and ingenious theory; yet it is hardly sufficient to account for all the features of the disease. There must be some want of stability of the motor centres, independent of the coarse lesions resulting from embolism, the evidence of the existence of which, moreover, is not complete, and which is certainly not constant.

In the case reported there was no voluntary control over the muscles, and at the same time the mind seemed to suffer: he was almost an idiot. When admitted, his temperature was 98¼°: therefore the attack of rheumatism was over, and these symptoms were not due to a fresh outburst of the rheumatic affection. The want of power in these muscles must also be taken into consideration, as showing a close relation between chorea and paralysis.

Now, coming to the question of treatment, the influence of the hyoscyamine, which was suggested by analogy from the treatment of tremor, was here strikingly manifest. The dose was increased from $\frac{1}{200}$ to $\frac{1}{100}$ grain without any bad effects; but when he was taking this quantity he complained of some dryness of the throat, although it never was so severe as to require us to reduce the dose again. It was finally discontinued two days ago. Now he is perfectly steady and can control his movements; his tongue is clean and he has a good color; he is gaining flesh: indeed, he may be considered as well.

Did the hyoscyamine produce the striking effect or did the rest in the hospital do it? That rest is good in all and can cure many cases of chorea, is admitted; but the improvement here was too sudden—coming on in three or four days—and too great to be attributed entirely to the good nursing and the food which he received since he was admitted. It is claimed that hyoscyamine is a valuable antispasmodic and exercises a remarkable control over muscular movements; also that with the control of the movements the condition of the muscles is improved and all the functions increased. Even the blood has improved; for, though he is still anæmic, he is not so much so as he was. Within a week after beginning the treatment he was out of bed and walking around, but not so well as at present.

What shall be given further? Will not the condition remain? Not necessarily; for all the irregular muscular movements have ceased. He can take, however, for his anæmia, the elixir of the pyrophosphate of iron, a drachm three times a day, and stop the hyoscyamine as having accomplished its purpose.

AMENORRHEA.

Dr. Skene, gynecologist to the Post Graduate School of New York, writes as follows on amenorrhea in the *Medical News*. In organic diseases, especially those of the liver, heart, lungs, or kidneys, in the advanced stages, we may look for derangements of menstruation. Amenorrhea is naturally a consequence of hepatic or heart affections, but in renal diseases the pathology is not as easy of explanation, as it is perhaps less mechanical than the former. I presume in amenorrhea occurring from renal disease, that is due more to malnutrition, tissue deterioration, and anemia. The point, however, to which I specially call attention is the necessity for us to look well to the general organization in obscure cases, and seek there the causes of amenorrhea, rather than in the pelvic organs themselves.

I would next call your attention to the management of amenorrhea in chlorotic patients. This condition, known as chlorosis, presents that peculiar form of organization in which we have a partial arrest of the development of the circulatory apparatus and sexual system.

The consequence arising from this insufficient development is that amenorrhea is the rule, as is also anemia. In chlorosis especially, the blood-making organs are sluggish and defective, the heart action is feeble and easily gives out; they become tired easily on the least exertion. Such individuals cannot afford to menstruate, although they may do so under ordinary circumstances. But the moment you put a tax upon the system by which their vitality is used up in other channels, they become very anemic and amenorrhea follows.

You will also find that these patients do not respond well to restoratives and tonics, as will any well-developed organization that is simply suffering from anemia for the time being, because of this peculiarity of organization which I have just described. We give them iron and good nourishing diet, and they improve so slowly and fall back so often that you will find the alterative tonics effect by far the most satisfactory results. You can, of course, never change the organization, or make a well developed, ruddy, vigorous woman of such a patient. In these cases you will find iodine, in the form of iodide of iron, answers well; this, however, is better in the strumous diathesis. In these cases of chlorosis we find that in mercury small doses is one of the best possible tonics. I know that if you give from one-thirtieth to one-fiftieth of a grain of the bichloride to a chlorotic patient three or four times daily, she will improve under the treatment, especially if you add the chloride of iron.

We must also remember that in the chlorotic girl the nervous system is below par, which would indicate the administration of chloride of arsenic. Such patients are likely to be dyspeptic, indicating a lack of gastric juice or its properties; hence, we administer hydrochloric acid. These remedies are contained in the mixture called "the four chlorides," viz., chloride of iron, chloride of arsenic, bichloride of mercury, and hydrochloric acid. Under this treatment it is surprising how these pale, greenish-yellow, looking girls will improve; but you must continue it for some time in order to obtain the best possible results.

Some may ask, "Are you not afraid to give one-fortieth of a grain of the bichloride of mercury for a long time." I have given it for two months regularly, and then stopped for one or two weeks, and then again continued it for one month longer, with out any bad effects whatever ensuing. I have also known it to be given for a longer period than that most marked beneficial results.

The rule is that amenorrhea appears in the advance stage of phthisis pulmonalis; when patients are in the third stage of the disease the menses becomes scanty, and finally cease altogether. But there are exceptions, and this case now before you well illustrates such a one. Where amenorrhea occurs in the first stage of phthisis, it seems to come simultaneously with the lung trouble. In this case it is evidently conservative; a patient with marked degeneration of the lung suffers from impairment of the whole nutritive system; she cannot afford to menstruate.

The cause here is organic disease of the respiratory organs, and until that is removed we can do nothing in the way of treatment for her amenorrhea. I insist upon this, and cannot impress it upon you too strongly, as upon this subject the laity, you will find, will have a great deal to say. Again and again have I seen them insist that the amenorrhea was the cause of the pulmonary difficulty; they would insist upon giving the patient hot foot-baths, hot drinks of all kinds, with decoctions of herb teas innumerable, in order, as they said, to establish menstruation.

SCHULTZE'S SWINGING MOTIONS TO REVIVE ASPHYCTIC NEW-BORN CHILDREN.

Prof. Schultze, of Jena, attracted the attention of the entire medical world when, a good many years ago, he first published his now famous mechanical method to revive new-born children laboring under asphyxia. The question whether a new-born child be actually still-born, and no vital energy be present at all, or whether the spark of life be really latent, ready to set agoing the functional mechanisms under appropriate stimulation, belongs to the most important problems that present themselves to the practitioner.

From a description of Schultze's swinging motions appearing in the December issue of *Schmidt's Jahrbücher* we make the following translation:

The child is caught by its shoulders, so as to place the thumb on the anterior surface of the thorax, the index finger in the axilla from behind, and the other three fingers of each hand transversely across the back, thus supporting the drooping head on the ulnar edges of the palmar aspects of the hands. Then spreading asunder one's feet and inclining the head somewhat forward, the child is swung with outstretched arms upward to an angle of 45°; then the swinging is stopped. The entire weight of the child rests at this moment on the thumb of the physician, which is pressed against the thorax of the child. This position occasions a considerable compression of the thoracic viscera not only from the diaphragm, but also from the chest-walls. This passive expiration occasions often a discharge of the aspirated fluids through the respiratory channels. Then the physician moves his arms downward, and swings rapidly the child toward his feet, whereby the thorax of the child is widened. As the child hangs by its upper extremities, and the sternal ends of the ribs are fixed, its own weight goes to elevate the ribs, while the diaphragm recedes on account of the shock imparted to the abdominal cavity. This equals a mechanical inspiration of a considerable importance. After a few seconds the child is again swung upward, and the aspirated fluid is then usually discharged.

WATER AS A DIURETIC.

In an article on the action and use of diuretics, in the *Practitioner*, Dr. T. Lauder Brunton says that water is, perhaps, the most powerful diuretic we possess, although fewer experiments have been made with it upon animals than with the others. The diuretic action of water drunk by a healthy man is very marked, and it appears impossible to explain its elimination by a mere increase in blood-pressure, whether general or local. It has the power of increasing tissue-change, and thus multiplying the products of tissue-waste which result from it, but it removes these waste products as fast as they are formed, and thus, by giving rise to increased appetite, provides fresh nutriment for the tissues, and thus acts as a true tonic. In persons who are accustomed to take too little water, the products of tissue-waste may be formed faster than they are removed, and thus accumulating may give rise to disease. If water be freely drunk by such persons, the products of waste will be removed and health maintained or restored. Many gouty persons are accustomed to take little or no water except in the form of a small cup of tea or coffee daily, besides what they get in the form of wine or beer. In such people a large tumbler of water drunk every morning, and especially with the addition of some nitrate or carbonate of potassium, will prevent a gouty paroxysm. Still more numerous, possibly, is the class of people who arise in the morning feeling weak and languid—more tired indeed than when they went to bed. Many such people are well fed, they sleep soundly, and it seems almost impossible to believe that the fatigue which they feel in the morning can result from imperfect nutrition, more especially as one finds that after moving about, the languor appears in a great measure to pass off. It seems that this languor must depend upon imperfect removal of the waste products from the body, as we know that the secretion of urine in healthy persons is generally much less during the night than during the day. Such people should drink a tumbler of water before going to bed in order to aid the secretion of urine and of the waste products during the night. In some cases, though not in all, the result has been satisfactory, and possibly might have been still more so, if the bicarbonate and nitrate of potassium, which are so useful in cases of gout, had been added to the water.

Lately a plan of treating gout by draughts of water at intervals during the day has been a good deal employed, and is in many cases successful. The following is a diet used along with this treatment by a medical friend:

7.30 a. m. Ten fluid ounces of very hot water. 8 a. m. Breakfast: equal parts of weak tea and milk, a small quantity of white sugar, a slice of fat bacon without a strip of lean, bread and fresh butter. 1 p. m. Milk-pudding, rice, sago, tapioca, macaroni, or blanc mange, and small biscuits with butter, ten fluid ounces of hot water. 4 to 5 p. m. Ten fluid ounces of hot water. 6 p. m. Dinner; white fish or fowl (usually boiled), greens, bread, no potatoes, claret seven fluid ounces. 8 to 9 p. m. Ten fluid ounces of hot water. 11 p. m. Ten fluid ounces of hot water.

If he indulges either in meat or game, or drinks copiously of claret, or omits one or two glasses of hot water, he feels gouty or gravelly next day. It is obvious that by this plan of treatment, in which the ingestion of nitrogenous food is most strictly limited, at the same time that every facility is given for the elimination of the products of nitrogenous waste by the large quantities of hot water drunk in the course of the day, the accumulation of waste in the tissues ought to be most effectually prevented.

TREATMENT OF CHOREA.

Dr. Gilbert, of the Hôpital des Enfants-Malades in Paris, lecturing on the therapeutics of chorea, said:

The routine treatment of all choreic patients at the mentioned hospital consists in the systematical exhibition of chloral hydrate and the application of the wet cloth. The reason why chloral fails in the hands of so many practitioners is not to be sought in the drug itself, but in the faulty method of its administration. In two little patients, some time ago, Gilbert gave fifteen grains of chloral every quarter of an hour until sleep was produced, and when the children awoke the same dose was again administered. In this manner a sleep was obtained which was in reality but twice interrupted in twenty-four hours, just the time needed for two meals. After four or five days the drug has to be stopped, as it would be dangerous to prolong this profound and continuous sleep. The results obtained by this method of treatment compared very favorably with those of other clinicians, who usually contented themselves with sufficiently large doses to produce sleep once or twice daily, and rarely pushed the medication beyond a couple of days. At present Gilbert gives chloral systematically three times daily, and for a period of two weeks to two months, until a cure is perfected, without ever having met with a single accident. A rubeoloid or erythematous eruption, unaccompanied by constitutional manifestations, has occasionally been noted, but disappeared spontaneously in twenty-four hours, even when the medication with chloral was continued.

This uniform method is intended to ameliorate the graver symptoms, and to procure a prolonged sleep. A choreic patient ought not only to sleep at night, but also once or twice during the day, preferably after meal-time. The question of dose is one of great importance. Gilbert gives in a patient beyond ten years of age, habitually sixty grains *pro dies*, fifteen grains in the morning, fifteen at noon, and thirty at night. This form of medication is to be continued until the choreic agitation is completely under control. In order to disguise

the disagreeable taste of the drug, the confection of chloral recommends itself, especially in the case of children. The confection is prepared by taking a watery concentrated solution of chloral and currant-jelly.

It is only in the graver form of chorea, in which chloral alone does not suffice to suppress the nervous and muscular excitation, that the wet cloth comes in as a potent adjuvant to the drug. As to its application, cold water solely is to be employed. The cloth is dipped into it, moderately expressed, and the patient laid upon a mattress covered with a rubber cloth. The body of the patient is then tightly wrapped up in a blanket and vigorously rubbed from the head toward the feet. After a couple of minutes, when reaction has taken place and the little patient has commenced to get warm, it is to be wrapped up in several woolen blankets without removing the wet sheet, leaving just the head free. In this sort of a steam-bath, then, the child is to remain on its bed for about half an hour, when reaction will have fully set in and done its intended work.

The effects of this procedure are invariably of the most excellent nature; the child feels calm and composed, and not rarely falls into a quiet and prolonged sleep, from which it awakens more tranquil than ever.

As these are the remarks of a well-known clinician with an extensive practice with choreic children, his method of treatment lays claim to our confidence, and invites a trial.

REMOVAL OF FOREIGN BODY IN THE URETHRA.

George Hunter, M.D., Linlithgow, Eng. *British Medical Journal.*

An elderly gentleman, suffering from dysuria, due to prostatic enlargement, attempted to empty the bladder by insinuating the rounded head of a veil-pin into the orifice of the urethra. The pin slipped from his fingers and disappeared in the urethra. Attempts at removal pushed the pin into the urethral canal, and were followed by discharges of blood and an urgent, but ineffectual, desire to urinate. Dr. H., being sent for, found the head of the pin in the membranous urethra, just in front of the prostate, the point being anterior to the scrotum. To remove it he fixed the head by pressing upon it from behind, forwards, and then impaled the urethra against the point. By steady pressure and traction on the point, the whole length of the pin was pulled through, only the head remaining in the urethra. The point was then depressed toward the perinæum, and, by compressing the flaccid penis in its longitudinal axis, the round head of the pin was easily passed through the meatus, and the entire pin withdrawn. Not a drop of blood was lost, and the puncture made on the under side of the penis was not more severe than that resulting from the use of an ordinary hypodermatic needle. Rest and quiet enjoined for twelve hours, but no other treatment. No sequelæ.

THE NOCTURNAL COUGH OF CHILDREN.

It not unfrequently happens that children are waked suddenly from quiet slumber by a violent and sometimes convulsive cough. This has been ascribed by McCoy to reflex irritation from accumulation of mucus within the nasal cavities. During the day the mucus flows away, but in the night it collects upon the sensitive areas in the nasal fossæ and excites a cough. Dr. Gonzalez Alvarez thinks this theory untenable, except in a few rare instances, and attributes the cough to laryngeal irritation. He says that the saliva and buccal mucus accumulate in considerable quantities, especially when there is stomatitis or gingivitis from dentition. Most of this is removed by the acts of deglutition which take place during sleep, but some does not so escape, but trickles into the posterior commissure of the larynx. He states that this cough occurs very frequently during the period of dentition, even when there is no nasal catarrh, a fact which leads him to reject the theory of nasal reflex irritation. The treatment of this nocturnal cough consists in diminishing the secretion by means of chlorate of potassium. A teaspoonful of a two per cent. solution is given every hour or two hours during the day, and at bedtime.—*Revue Bibliographique des Sciences Medicales*, November 22, 1885—*Med. Record.*

ICE TO THE SPINE IN OBSTINATE VOMITING.

Dr. W. L. Davis reports (*Mississippi Valley Med. Monthly*) a case of vomiting in typhoid fever in which every remedy, even pellets of ice, was rejected by the stomach. He applied ice to the lower part of the spine in considerable quantity, and the vomiting instantly ceased; a profuse perspiration followed. The use of ice was only persisted in when indicated; and cool sponging was instituted with marked benefit, so that the ice was only occasionally required. Recovery in the average time took place.

BISMUTH IN THE TREATMENT OF SWEATING FEET.

The *Union Medical* cites Vleuss's recommendation of daily frictions with subnitrate of bismuth as a remedy for fœtid perspiration of the feet. The spaces between the toes should not be forgotten. The treatment is to be continued for about a fortnight. After the second or third friction, the sweating becomes less abundant, and the soreness rapidly subsides. The epidermis soon loses its white tint, and adheres more firmly to the subjacent derma, the excessive action of the sudoriparous and sebaceous glands diminishes, the perspiration becomes less irritating, and about the sixth day the skin resumes its natural look.—*N.Y. Medical Journal.*

TREATMENT OF PULMONARY CONSUMPTION.

Dr. Da Costa's treatment we take from the *College and Clinical Record*, October 1st:

Hygienic Treatment.—Out-door exercise, good food, warm clothing; climate of paramount importance. The best climate, by far, is that found in Egypt; Algeria is a good place. In this country, New Mexico, Southern California, South Carolina, Thomasville in Georgia, Florida. Colorado, for some cases, is an excellent climate. Cases having a co-existing bronchitis do better in a damp and mild climate, as Florida, etc. The element of change is very useful. The Adirondacks is a fine place for those early cases in which there is no tendency to hemorrhage. Prof. Da Costa does not care much for the "milk diet," but allows it in conjunction with other things. Gives plenty of meats and alcohol in moderation, especially in those cases free from fever. Mix it with ol. morrhuæ, and lessen the tendency to its abuse. Whiskey and brandy are the best stimulants here. You need not interdict smoking.

Medicines.—Ol. morrhuæ is of great utility by improving nutrition and also by affecting the tubercle. Do not use its substitutes, as glycerine, etc. Give f℥ss, ter die, one hour after meals. To disguise it, and to promote its ready absorption, give m x-xv ether, but this sometimes causes belching. Mix it with equal amount of malt or whisky. When the appetite fails stop its use for a while. Do not permit the oil to be taken in hot weather.

Next in importance is arsenic in small doses in the early stages; arsenious acid, gr. $\frac{1}{40}$ or gtt. iij Fowler's solution, ter die. In the late stages it will be of no avail.

A third remedy is iodine; it should be more generally used; liq. iodi comp, gtt. i-iij, ter die, with potassium iodide to alternate with it. When anæmia is present, *and not much fever*, use iodide of iron. It is very valuable. Push it up to the point of tolerance. Begin with gtt. xv of the officinal syrup, and push up to f℥j, ter die.

Prof. Da Costa does not like the hypophosphites. They have no special effect, as ol. morrhuæ and arsenic. Inhalations of sodium benzoate are of no use. Carbolic acid and tar by inhalation are of some avail.

Treatment of Special Symptoms—Entirely too much is done for the symptoms. For cough we should give no expectorant unless bronchitis exists. Since the cough is generally an irritative one, morphia must, in time, be given. Codeia, gr. $\frac{1}{8}$—$\frac{1}{4}$, in simple elixir, often has a wonderful effect and does not constipate. Prussic acid or fluid extract of wild cherry is very useful at times. We may combine the acid with morphia. Inhalations of oil of eucalyptus give relief.

Night Sweats.—Give atropia, gr $\frac{1}{80}$, at bed-time, Sponge off the body with hot water to constringe the vessels. Infusion of sage at night. Mineral acids, especially sulphuric acid. Zinc oxide, gr. ij, ter die. Ergotin or fluid extract of ergot is better than morphia in some respects. It is more permanent and does not cause dryness. Give ergotin, gr. ij, ter die, the last dose at bed-time.

Digestive System.—The patient often has vomiting. Two excellent remedies may be given, as carbolic acid or creasote, gr. $\frac{1}{4}$, four times per diem. Strychnia, gr. $\frac{1}{30}$, ter die, is also of great value.

Diarrhœa,—Opium, bismuth, ℈j; copper sulphate, gr. $\frac{1}{15}$; silver nitrate, gr. $\frac{1}{4}$, etc.

The Throat in Phthisis.—It may be swollen, and the larynx the seat of ulcers, which may become tubercular. Drink demulcents, as Irish moss (3j to the Oj).

Prof. Da Costa has confidence in local applications of iodoform and cocaine. Let the patient eat his meals while the parts are under the effect of cocaine.

For *Irritative fever.*—

℞. Quininæ sulph.,.....gr.iss.
Digitalis,.....gr.ss
Opii,.....gr. ¼. M.
Ft. pil.
SIG.—Ter die.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL APRIL, 1886.

FIFTEENTH ANNUAL CONVOCATION OF THE MEDICAL FACULTY OF BISHOP'S COLLEGE.

This Convocation for conferring degrees in Medicine was held in the Synod Hall, Montreal, on the 13th of April. There was a large attendance of the friends of the College to witness the proceedings, the ladies, as usual, being present in full force. Owing to the unavoidable absence of

the Chancellor the meeting was presided over by the Vice-Chancellor, the Rev. Dr. Norman. There was also on the platform the Dean of the Medical Faculty, Dr. F. W. Campbell, and the Registrar, Dr. Kennedy. The secretary of the University, Mr. Chapman, also assisted. There was also present the members of the Medical Faculty and other members of Convocation.

The Vice-Chancellor in some well-chosen and apposite remarks referred to the unavoidable absence of the Chancellor, and paid him a deserved tribute for his devotion to education and his great interest in and love for Bishop's College. The number of students the past session was two in excess of last year. Twelve years ago many French Canadian students had taken courses in the College, but these had entirely fallen off for various reasons, and these now attended colleges of their own religion. Ten years ago a large proportion of the graduates went to the United States, but of late years many remained in Canada and practised with much success. In this city four are practising with honor and profit to themselves and to the College. The scope of the College is enlarging yearly, though it has had many financial difficulties to contend with, amongst others the large rent paid for the present buildings. It is to be hoped that the Faculty will soon be enabled to become proprietors. Three of the Professors visit Europe this season for the purpose of special researches in study. In the Eastern Townships twelve of the graduates are settled. Last May the Dean of this College was put on the staff of the Montreal General Hospital. The Vice-Chancellor also spoke of affiliations made with other colleges and schools of learning. He also mentioned the fact that he thought the cause of education would be enhanced if a central university in connection with the Anglican Church were established, or, if too many difficulties presented themselves, it might be confined to a central board of examiners. He had the pleasure to announce that the Rev. Thos. Adams, the new Principal of Bishop's College, was using his best efforts to build a wing to the College, to be entitled the Bishop Williams' wing, in which it was contemplated to have a chemical laboratory. The sum of five thousand dollars was required, of which twenty-seven hundred had already been promised. He could, therefore, state that the prospects of the College were most encouraging. A deserved tribute was paid to the late Principal of the College, and also to the present one. Mrs. Davis had made the College her residuary legatee, and had also given a direct bequest of $8,000, and her sister, Miss Davidson, had also given the latter sum, making a total of $16,000. He spoke of the ability and zeal of the Professors, and concluded an eloquent address with a peroration upon the advantages of general study when following up a certain branch.

Dean Campbell then read the following report: The number of matriculated students was twenty-five; three from the West Indies, seven from Montreal, one from Ontario, and the balance from the Province of Quebec.

Botany—C. E. Vidal, 1st class honors and prize; L. M. Clark, T. S. Nichol.

Practical Anatomy—F. H. Pickel, senior prize; C. E. Vidal, junior prize.

Materia Medica and Therapeutics—W. E. Fairfield, F. H. Pickel, A. S. Thomas, J. M. Rohlehr.

Anatomy—F. H. Pickle, A. E. Phelan, A. S. Thomas.

Physiology— F. H. Pickel.

Chemistry—F. H. Pickel.

Hygiene—A. E. Phelan, F. H. Pickel.

Practical Chemistry—F. H. Pickel.

Primary Examination—W. E. Fairfield, Clarenceville, Que., 1st class honors and David Scholarship; A. E. Phelan and F. H. Pickel, 1st class honors; A. S. Thomas, 2nd class honors.

Medical Jurisprudence—R. Campbell, W. E. Fairfield, A. E. Phelan, A. P. Scott, A. S. Thomas, J. M. Rohlehr.

Pathology—W. E. Fairfield, R. Campbell, A. E. Phelan, A. P. Scott, V. I. Groulx, S. A. Thomas.

The following passed the final examinations, comprising Practice of Medicine, Surgery, Obstetrics, Gynecology, Medical Jurisprudence, Pathology, Clinical Medicine and Clinical Surgery:

Albert E. Longeway, of Dunham, P. Q., first-class honors and "Wood" gold medal.

Edward O'Brien Freligh, Montreal.

Angus O. Patton, Caughnawaga.

W. G. Nichol, Montreal.

Dr. A. E. Longeway also won the Nelson gold medal, having taken very high marks in the special examination on Surgery.

Wood gold medal and "Nelson" gold medal—Albert Ernest Longeway, Dunham, P.Q.

David Scholarship, for the best examination in the primary branches—W. E. Fairfield, Clarenceville, P. Q.

Botany prize—C. E. Vidal, St. Johns, P. Q.

Senior Anatomy prize—F. H. Pickel, Sweetsburg, P. Q.

Junior Anatomy prize—C. E. Vidal, St. Johns, P. Q.

The following gentlemen received honorable mention, having won first-class honors in the primary branche : A. E. Phelan, F. H. Pickel.

The medical oath was then administered by the Registrar, Dr. Kennedy, to the four gentlemen who had passed the final examinations, they also affirming their allegiance as British subjects, the National Anthem was afterwards sung by all present. The Dean next presented the candidates for the degree of C. M., M.D., which was conferred upon them by the Vice-Chancellor.

The medals and other prizes were then given. The *ad eundem* degree of M. D. being conferred upon Dr. Rowell, Professor of Anatomy. The valedictory, an interesting and able one, was delivered by Dr. Saunders, a recent graduate of the College. This will be found elsewhere in our columns. After additional remarks by the Vice-Chancellor, the meeting was dismissed by benediction.

THE BLOOD-PLAQUE.

We have read with pleasure one of the Cartwright Lectures, recently delivered before the Association of the Alumni of the College of Physicians and Surgeons, New York, by our esteemed friend Dr. Osler, on Blood-plaque.

The third corpuscle or blood-plaque is colorless disks of protoplasm measuring 1·5 to 3·5 micro-millimetres. Various terms have been used by writers to indicate this body, for example: *elementary corpuscles*—Zimmermann; *granular debris* or Schultz's *granule masses; hæmatoplast*, Hazen's; *blutplattchen, blood-plate* by Bizzozero. The term *plaque* has lately been given to this body by Kemp of John Hopkin's University. They probably exist in the blood of all mammals. In man in a state of health they are found in the proportion of 1 to 18 or 20 red corpuscles, or 35 or 40 to 1 white corpuscle. There are from 200,000 to 300,000 per cubic millimetre.

They may be well seen in the thin, transparent vessels of the omentum of a white rat, if the current is slow. When removed from the blood-vessels they rapidly change and disintegrate, but may be examined and preserved by receiving the blood into a solution of ½ to 1 per cent. of osmic acid or into Pacini's solution. Like all protoplasmic bodies they may be stained with the aniline dyes.

They are circular desks, and probably flat although they sometimes seem to alter a little in form, and closely resemble a biconcave disk. In the recent state they present no nucleus, but after the addition of preserving fluids there appear a collection of granules having very much the appearance of a nucleus, and which in dried preparations take a deeper stain in the hæmatoxylon than the remainder of the plaque, and is regarded by Hazen as a nucleus.

They seem to be most numerous in weakened, debilitated conditions of the system. In acute diseases they are not more numerous at first, but increase in numbers, during the 2nd, 3rd and 4th weeks. This is true of typhoid fever. In the 3rd and 4th weeks of this exhausting fever they may be found in great numbers. Patients debilitated by cancers, tubercle, etc., have them in marked excess. In blood diseases they are variable. Dr. Osler states that he has found them in extraordinary numbers in Hodgkins' disease, while in some cases of pernicious anæmia they may be absent or scanty.

Different views are held as to their origin, many believing them to be the debris resulting from the disintegration of leucocytes, but Dr. Osler, from his observations of the plaques in the newly-born rat, thinks this theory of their origin untenable. There is said to be no evidence that they result from the degeneration of the red corpuscles. Many believe them to be independent elements in the blood, and others agree with Hazen that they are young red corpuscles.

PERSONAL.

The death of Professor Fehling, at Stuttgart, is announced. The re-agent for testing the presence of sugar in urine bears his name. He had attained the age of seventy-five.

Dr. George E. Fenwick, of Montreal, has been elected an Honorary Member of the New York State Medical Society.

REVIEWS.

Minor Surgical Gynecology by PAUL F. MUNDÉ, M.D. New York., Wm. Wood & Co., 1885.

Even in these days of uterine specialism when the average Medical Journal is crowded with notices of books having reference to Gynecological

practice any work by such a well-known author is welcome. It will be remembered that in the issues of 1880 Wood's Library contained a work by Professor Mundé covering part of the ground occupied by "Surgical Gynecology."

The book before us comprises the manual in the Library and a great deal more. We believe it to be the best handbook of the kind that has yet appeared, and the second revised edition is a very great improvement upon the first, which appeared nearly six years ago. We wish we could make ourselves believe that the good results stated to result from the use of pessaries, even when applied with the case prescribed by Mundé, are obtainable in practice, but we confess to considerable scepticism on that score. The resumé of rules for their use (page 397) are admirably laid down, and doubtless if they are adhered to will, while they reduce the number of pessaries employed, very considerably lessen the dangers and inconvenience arising from their use.

The Pedigree of Disease. Being six lectures on Temperament, Idiosyncrasy and Diatheses. Delivered in the Theatre of the Royal College of Surgeons in the Session of 1881, By Jonathan Hutchinson, F.R.S., late Professor of Surgery and Pathology in the College; Emeritus Professor of Surgery in the London Hospital; President of the Opthalmological Society, etc., etc. New York: William Wood & Co., 56 and 58 Lafayette Place, 1885.

These lectures, dealing with fundamental principle, are of great interest to all practitioners of medicine, as in fact anything written by Jonathan Hutchinson is sure to be. Good reasons are given to show that "temperament," upon which our forefathers laid so much stress, is the result of the combined effect of race, and disease, personal or inherited. The domain of *Idiosyncrasy* is shown to be very large, and a correct knowledge of the idiosyncrasy of our patients exceedingly helpful in their guidance and treatment. The author speaks of three (3) great universal diatheses viz.: catarrhal, rheumatic and the scrofulous. Of parallel but of minor importance, are the diatheses of senile degeneration, of malignant new growths and of rickets, bronchocele, scurvy, leprosy, pellapa, and gout. The hæmorrhagic diathesis is thought by the author to be due to gout in some of the patient's proginetors.

The work is remarkably suggestive, full of interest, and by one in a position to speak with authority. We cannot recommend it to our readers too highly.

A Practical Treatise on Nasal Catarrh and Allied Diseases. By Beverly Robinson, A.M., M.D., (Paris) Clinical Professor of Medicine at the Bellevue Hospital Medical College, New York; Physician to St. Luke and Charity Hospitals, etc., etc. Second Edition, revised and enlarged, with one hundred and fifty-two wood engravings. New York: William Wood & Co.

This is a comprehensive treatise on the subject indicated by the title. The style is clear, and the numerous illustrations of instruments and their mode of application is such as to give to the student or young practitioner a clear idea of the way he should handle them in the treatment of the nasal and naso-pharyngeal spaces. The treatment is rather empirical, and undue prominence given to set forms of prescriptions, instead of demonstrating the pathological condition present, and the therapeutic indications. The work is a safe guide to work with.

Hay Fever, and its Successful Treatment by Superficial Organic Alteration of the Nasal Mucous Membrane. By CHARLES E. SAYOUS, M.D., instructor in Laryngology, and Rhinology in the Post Graduate Course, Jefferson Medical College. Philadelphia: F. A. Davis, attorney, publisher, 1885.

This small volume gives a history of this affection, but the principal object of its publication is to draw the attention of the profession to the author's belief that a local condition of the nasal mucous membrane is an essential factor in the production of an attack of hay fever. Moreover that as long as this local condition is overlooked, all efforts to conquer the disease will be fruitless. The author takes as the basis of his proposition an extract from an article on "Nasal Cough," by Dr. MacKenzie of Baltimore, which appeared in the *American Journal of Medical Science* for July, 1883, which says, "there exists in the nose a well-defined sensitive area, whose stimulation through a local pathological process or through *ab extra* irritation is capable of producing an excitation which finds its expression in a reflex act." He finds this area at the posterior end of the inferior turbinated bones and the corresponding portions of the septum. Dr. Hark, a German

author, locates another such spot at the anterior extremity of the inferior turbinated bone, while the writer of this volume describes a third sensitive area which he has found in the anterior portion of the nasal cavity forming the anterior boundary of the vestibule and located upon the nasal wall, as well as on the septum. He proposes to destroy their extreme sensitiveness by means of either nitric, chromic, or glacial acetic acids, and he records some markedly successful cures. The work is well worthy of perusal.

The Field and Limitation of the Operative Surgery of the Brain. By JOHN B. ROBERTS, M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic. Price $1.25. Philadelphia: P. Blakiston, Son & Co., 1885; Montreal: Dawson Bros.

This is an essay read last year at the meeting of the American Surgical Association, and its subject is one of the most profound interest to all who practice the surgical art. Undoubtedly the author is not alone in the view which he holds, that life is often sacrificed to the do-nothing treatment of many surgical brain affections. We trust his book will receive the candid consideration it deserves. If it does we believe only good can follow its publication.

Essentials of Vaccination A Compilation of Facts relative to Vaccine Inoculation and its Influence on the Prevention of Small-pox. By W. A. HARDAWAY, M.D., St. Louis. J. H. Chambers, publisher, 1886.

A very excellent book, and full of facts of a very telling character in favor of the protective power of vaccination. We hope it will have a large sale. If we had our way we would have our Local Government present a copy to the many lukewarm supporters of vaccination in the Province of Quebec. If their reason is capable of appreciating facts their conversion might follow and then—well—the millenium.

Berlin, as a Medical Center: A Guide for American Practitioners and Students. By HORATIO R. BIGELOW, M.D., Sandy Hook, Connecticut. New England Publishing Co., 1885.

This little *brochure* appeared last year in the *New England Monthly*, and contains a great deal of information of a character to be very valuable to all who intend to prosecute medical study in that great centre—Berlin. Any one intending to go there should obtain it.

A Guide to the Practical Examination of the Urine. By JAMES TYSON, M.D. Fifth edition, revised and corrected, with colored plates, and wood engravings. Philadelphia: P. Blakiston, Son & Co., 1886; Montreal: Dawson Bros.

As each edition of this little book has made its appearance we have expressed the high opinion we entertain of its value. We can only do so again. It is without doubt a volume which should be in the possession of every student of medicine and every practitioner. We have used it almost daily for several years, and would not be without it for ten times its value. The present edition is well up to the times.

LOCAL AND GENERAL.

What wonderful effects are claimed for remedies? In looking through medical journals one feels inclined to ask himself by what mental process reporters of semi-miraculous cures arrive at their conclusions. If one-half the effect claimed for drugs were really obtainable what a paradise would be this mundane sphere! Here is a sample: Dr. B. F. Nicholls, writing in a recent number of the *Philadelphia Medical Times*, says that he considers fluid extract of hamamelis in teaspoonful doses "almost a specific in varicose veins from almost any cause," and in support of this extraordinary statement he quotes from cases in practice where the drug had been used with apparent success. I have not tried hamamelis in varix of the lower limbs, but I would suggest that Dr. Nicholls might have given the bandaging, compresses and rest some of the credit for the satisfactory results in the cases brought forward by him.

At last we are to have a Bill introduced into our Local Legislature which will, *inter alia*, deal with the question of the registration of births and deaths. Indirectly this is one of the results of our late small-pox epidemic, and is an apt illustration of the proverb which refers to "ill winds" of that kind. Registration will enable us to deal thoroughly with vaccination and with anti-vaccination. The opponents of the compulsory clause as regards vaccination should be gently dealt with. The mental obliquity that afflicts the leaders of this re-

trograde movement should be treated as one would treat other forms of aberration of intellect—not by the straight jacket, but by judicious firmness. If the compulsory regulation were not to go into effect until three years had gone by I am certain the opposition will by that time have melted away. In the meantime the practice of it can be continually and steadfastly and intelligently pushed, and the people will soon find how very little truth there is in the dreadful stories claimed by the anti-vaccinationists as true.

Speaking of mental troubles reminds me of Sutherland's article on insanity (*British Medical Journal* for January 30th) and it is to be remarked regarding it that very many valuable observations are there crowded into small space. He speaks chiefly of the premonitory symptoms of insanity and devotes some space to their treatment. Esquirol's three stages of insanity are cleverly referred to the different classes of persons with whom the unfortunate comes in contact during the progress of his disease. The first stage (change of habits) is usually observed only by the relatives of the patient; in the second (perversion of the affections) the family physician is added to the list of observers; while in the last stage (that of true insanity) the asylum superintendent takes the patient in hand. Unless patients have suffered from a previous attack it is almost impossible to guess during the first stages what form the insanity will assume.

Unless the result of alcohol drinking, following injury, or from sunstroke (when an attack of mania may be the first sign of the trouble) the disease rarely begins with excitement. Indeed the majority of cases are usually preceded by a depression period, the *stadium melancholicum* of Guislain.

Change of habits! that is the characteristic symptom. *Alienus*, the man acts as if he were some other man and not the rational creature we once knew him to be. He is extravagant, suspicious, and jealous, when he used to be careful, open and confiding. He loses his memory, neglects his dress, becomes depressed, and gets "eccentric." The style of conversation is changed, oaths and obscene language are uttered by those who were previously unknown to be guilty of such conduct. Sexual appetite varies, but, strangely enough, it is in excess in general paralysis and in senile dementia. The maid servant, says the lecturer, is frequently found to be pregnant by the master before any mental aberration is discovered by the relations. This sounds like an irreverent statement, but it is not to be forgotten in the diagnosis and prognosis of insanity.

This is the free-and-easy way in which some correspondents write to and editors publish letters in Western Medical periodicals. The Texas *Courier Record* contains the following description of dengue "by one who has had it:"

Dengue is a viviparous, homogeneous, amphibious hermaphrodite from the head of "bitter creek," close to "wild cat run." It is indigenous in Austin and spontaneous in Dallas—among hogs, dogs, cats, and other non-office seekers. It is contra-indicated in all cases where a fellow expect to engage in a prize fight or make a "crap." It is bilateral, having an inside and an outside. It has no symptoms—it strikes a fellow on his way from church or in a saloon, and paralyzes him to the end of his hair, and then feels out for "other worlds to conquer." Its pathology is confined mostly to the whole body, skin and mouth. It destroys a man's pugnacity and plants instead thereof humility and a third-class case of rheumatic-gout-small-pox-fits-inflew-endways and chloroformmorbus. Those who have not had their pegs knocked from under them by this fiendish short-rib searcher say they think they have "had a touch of it." To all such we wish to say:—wait till it "touches" you up in earnest, and then you will say in the words of Horace Greeley, "I have *wilted*."

The Cartwright Lectures were delivered by Dr. Osler before the Alumni Association of the New York College of Physicians and Surgeons. The subject, "Certain Problems in the Physiology of the Blood," was treated of in three lectures, and the course has been spoken of in a way which should make every Canadian feel proud. The Philadelphia *Medical News* and New York *Medical Record* both contain the lectures *in extenso*, and every one should read them.

Here is an odd contribution to the study of biology in the Journal of the State Board of Health for Tennessee. Dr. D. F. Wright describes a condition in eggs which he claims is a true inflammation thereof:—"There is a condition of the egg, very little known, which considerably impairs its sanitary value as an article of food. Soon after it became the practice to transport eggs in large quantities and to long distances by railway trains

it was found on their arrival that adhesion had taken place between the membranes of the yolk and those of the shell, so that the yolk could not be turned out of the shell unbroken. On examination by experienced pathologist this was found to be the result of true inflammation; the material of the adhesion was found to be precisely the same as that of the plastic exudation in inflammation of the lungs or bowels. It will at first seem absurd to speak of inflammation in such an unformed mass as an egg; but this arises from our forgetting, that, structureless and unorganized as it seems, the egg, even when fresh laid, is a living being, and capable of disease from external causes. The cause of this inflammation is undoubtedly the shaking and friction from the motion of the cars, and it cannot but render the egg more or less unhealthy, as the products of inflammation can never be as salutary in food as those of healthy growth.

Yes, the egg may contain the "promise and potency of life," but not those vital conditions without which we cannot have a true inflammatory state. The new-laid egg is *not* a living being until certain changes have occurred in it—until the necessary blood channels and until the nerve fibres to regulate the flow of the blood in them have been formed. When the formative process has been sufficiently advanced to permit of the definite process called inflammation then, and only then, can we have the inflammatory exudation which Dr. Wright speaks of. Springs, wheels, dial, hands, etc., are not a clock, neither is an egg the most diminutive kind of chicken.

A good deal of journal space is still devoted to thallin and antipyrin. A good account of the supposed anti-pyretic properties of thallin is given by Dr. Crozer Griffith (Dr. Osler's assistant) in a recent number of the Philadelphia *Medical News*.

Thallin has nothing to do with the metal thallium, altough they both derive their name from the same Greek root. Its chemical formula is $C_{10} H_{15} NO$, its formal name is hydrate of parachinanisol or, if you prefer, you may call it tetrahydroparamethyloxyquinolin. It is a pale yellow or white powder with an agreeable, aromatic odor, said to resemble that of the trailing arbutus. The taste, however, is bitter, pungent and disagreeable. It is easily soluble in water, with difficulty in alcohol, and insoluble in ether. The first to use it was Von Jaksch in Nothnagel's clinic. He concludes that thallin is very similar in its action to antipyrin, although in much smaller doses, but claims that it is more rapid in its action, although the fall of temperature produced lasts for a shorter time. It is also less dangerous; inasmuch as it never causes collapse, as does the latter drug. Both agents may produce profuse sweating; and chilliness or rigors often occur with the subsequent rise of the temperature after the action of the medicines has ceased.

These conclusions he reached by giving thirty cases of various diseases, accompanied by fever, alternating doses of antipyrin and thallin. His investigations, throughout, were most careful and thorough. The usual dose of thallin as administered by him is four to fifteen grains, given at one time, and repeated in one or two hours if no effect is produced. The degree of reduction of temperature obtained varies somewhat, and the duration of the lowered temperature lasts usually but a few hours.

Dr. Griffith concludes from clinical experiments that thallin is efficacious in reducing temperature in most cases of fever but frequently decided depressions of strength occur (with profuse diaphoresis) during its administration and it must be given with great care to debilitated patients. The cost of the drug is about three dollars an ounce laid down in Montreal.

The Contagious Diseases Acts, by which prostitution was regulated in certain British military stations has been repealed by the rather large majority of 114 in the House of Commons. There has been persistent opposition to these legislative enactments ever since their passage in 1875. Whether they accomplished the good claimed for them (the repression of vice and the prevention of venereal diseases) is a much-disputed question, but the English people chafe under the restrictions which on the continent have been in force for so many years in the large cities. Now that the opponents of the regulative plan have carried the day what do they propose to put into its place, or do they abandon the attempt to limit the spread of syphilis and gonorrhœa, as is done in this and other favored localities?

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, MAY, 1886. No. 8.

CONTENTS.

ORIGINAL COMMUNICATIONS.

Clinical Lecture 505

PROGRESS OF SCIENCE.

Treatment of Acute Infantile Bronchitis 507
Headache 511
On the Treatment of Furuncles 513
Diarrhœa and Dysentery in Childr n. 514
The Treatment of Profuse Hæmoptysis 515
The Management of Placenta Prævia. 516
Treatment of the Chancroid 516
A New Method for the Removal of Foreign Bodies from the Nose 517
The Prevention of Baldness 517
Vaccination 518
Chiene's Contributions to Practical Surgery 518
Nitro-Glycerin in the Cold Stage of Intermittent Fever 519
Pneumonia Treated by Intraparenchymatous Injections 519
Massive Doses of Digitalis in Lobar Pneumonia 520
Some Points in the Practice of Artificial Respiration in cases of Stillbirth and of Apparent Death after Tracheotomy 520
Diabetes Mellitus Successfully Treated with Boracic Acid 520
A Hint on the Treatment of Ringworm 521
Tubercular Meningitis cured by Iodoform 521
The Prevention of Mammary Abscess 521
Dover's Powder and its Modifications 522
Pruritus of Women—Local Treatment 522
Hypodermic Injections of Cold Water in Sciatica 522
Hot Water in Acute Prostatitis 522
Venesection 522
Modification of Dover's Powder 523

EDITORIAL.

Montreal General Hospital 523
Proposed Change in the Quebec College of Physicians and Surgeons 524
Alexander's Operation 525
College of Physicians and Surgeons, Province of Quebec 525
Personal 527
Local and General 528

Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital February 23rd 1886.

BY FRANCIS W. CAMPBELL, A.M., M.D., L.R.C.P. L.

(Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

ECZEMA.

GENTLEMEN,—The woman now before you came to the Out-door Clinic yesterday, complaining of the rash on the back of her neck, which I now show you. She has had it for some time, and its irritation has been the source of much annoyance to her. The disease is eczema, which may be acute or chronic, and has several sub-divisions, —usually four: 1. Eczema Erythematosum. 2. Eczema Vesiculosum. 3. Eczema Papulosum. 4. Eczema Pustulosum. The case now before you is of the first variety, viz., Eczema Erythematosum. It is a distinct inflammation of the skin, characterized by a somewhat inflammatory surface—some infiltration, swelling and itching, and terminating in desquamation or shedding of the skin. It is perhaps the most common variety which we meet with, and has a strong tendency to become chronic. Slight moisture is, upon rare occasions present, but as a rule the disease remains dry throughout. The disease is curable, and the means used must be both constitutional and local. In cases of not very long duration saline aperients, as sulphate of magnesia, cream of tartar and Rochelle salts, should be given. When the disease occurs in childrenr, hubarb is especially recommended. Diuretics are also advised, as acetate of potash and liq. potassæ. Various mineral waters, as the Saratoga, Vichy and Carlsbad, are beneficial. In worn-out, debilitated subjects, iron, quinine, and cod liver oil, are very valuable. Arsenic should be given in very small doses —ii. gtt. three times a day after meals. Local treatment must always be followed. In the variety now before you the following lotion will be prescribed, and I believe will act beneficially:

R. Acid carbolic, ʒ ss; glycerinæ gtt. xv; alcoholis, ʒ i; aquæ, ʒ iv. M. ft. lotio. Apply several times a day by means of a small sponge.

This patient, gentlemen, possesses a double interest to us, inasmuch as while coming to get relief for one disease our attention is attracted to a second disease from which she is suffering. Although the disease is considered a surgical one it is rarely bad enough to fall into the hands of an operating surgeon. Most generally the physician is called upon to treat it, and for this reason I draw your attention to it. As she bares her neck you will notice a distinct swelling over the front of the throat—that is over the situation of the thyroid gland. This disease is known as goitre or bronchocele, and is much more common in women than in men. In fact during all my experience I can only recall two or three cases in males, while I have seen many hundreds in females. The cause is thought to have some connection with the locality in which the patients live. It is said that low, moist situations favor it, while high, airy places are extempt. In this city it was very common some years ago, and is still often met with on the flat which commences where this hospital stands, and which ends at the foot of the hill—which terminates at Sherbrooke street. It was believed to have been

caused by drinking well-water which was largely impregnated with lime; and its comparative rarity now is said to be due to the fact that in very few places do wells now exist, so that the water-supply is almost entirely obtained from the river. It is met with in animals. Its size varies from a walnut to an adult head—the first is not troublesome, the latter serious, from its interference with respiration, and will most likely demand surgical interference. The gland has two lobes, both are generally affected, but not equally. It is not painful, and the general health is not impaired. As a rule, the enlargement is slow—but I have known it to increase in size very rapidly.

The treatment of goitre is unsatisfactory, except when the tumor is so large as to interfere with respiration and removal is demanded. If the patient survive the result is most satisfactory. The medical treatment is the application of iodine paint, the use of leaches, blisters and purgatives. I prefer to use the compound iodine ointment instead of the tincture. The latter blisters speedily, so as to necessitate its discontinuance, the ointment does not. You may give iodine internally, also iodide of potash, and some advise the protoiodide of mercury, to the extent of slight salvation. In India the biniodide of mercury ointment is used as a local application, the patient subsequently exposing the neck for a considerable time to the rays of the sun. It has been tried here and with a certain measure of success. Ergotine internally and the hypodermic injection of ergotine into the tumor is spoken of by several writers as acting well. As the patient does not give any heed to the affection I will not waste medicine by attempting treatment. As she came for the skin disease I have taken advantage of saying a word or two upon the other.

NEURALGIA OF THE FIFTH PAIR OF NERVES.

The patient now before you has been twice at the Out-door Clinic. She is 23 years of age, and not by any means of a robust constitution, in fact, I question much, from her development, if she has ever since attaining womanhood enjoyed what is known as "robust health;" she has been suffering for some time from a feeling of debility, a disinclination to attend to any work, with shooting pains over various portions of her head, which within a few days have largely centred over that portion of the face and head which is supplied by the ophthalmic division of the fifth nerve, viz., the side of the nose, the eyelids, the lachrymal gland, the globe of the eye, the conjunctiva, the forehead and the scalp. The most severe spot in this case is at the supra-orbital foramen, where the nerve passes out to ramify on the forehead and scalp; and the paroxysms of pain are paroxysmal and of a sharp, lancinating character. Any mental or physical exertion increases the pain, which not unfrequently causes nausea and vomiting. We do not often meet with this affection before the period of puberty is reached, and it occurs most often in females There is unquestionably very often a transmitted hereditary influence. Neuralgia is very common in marshy districts, due to malaria. In women it often follows the exhaustion which ensues from prolonged lactation, also from menorrhagia or profuse menstruation. Mental anxiety and exposure to cold are also causes. Cases which may be improving under treatment often relapse from a careless exposure to a damp, cold wind.

The treatment is constitutional and local. If the disease is believed to be of malarial origin, quinine in doses of gr. ii. every four or six hours is the appropriate remedy, arsenic, Fowler's solution, (liquor arsenalis) in doses of four drops, twice a day, after meals, largely diluted. If it does not yield you may increase the dose gradually to eight drops. The arsenic may be injected hypodermically. This method is strongly advised by Dr. Hammond of New York. General tonics, as cod liver oil, iron and strychnia, are beneficial; ergot is also a valuable remedy. The pain is sometimes so unbearable that the following combination, prepared by John Wyeth & Brothers will be found, under such circumstances, of decided advantage: ℞ Quinine sulph. gr. 1½; morphia mur., gr. 1-20.; strychnia, 1-30; ext. aconite, gr. ¼ in a pill. The well-known physician, Dr. Brown-Sequard, has recommended the following pill, which I have often used with advantage: R. ext. hyosciami 2-3 gr.; ext. conii 2-3 gr.; ext. ignat. amar. ½ gr.; ext opii. ½ gr.; ext. aconite 1-3 gr.; ext canab. ind., ¼ gr.; ext stramon, 1-5 gr.; ext belladonnæ, 1-6 grain. If you do not think it necessary to give opii, which you will notice is in the above combination, you may use the following: ℞ Quin. S. gr. ii. strychnine, 1-30 gr.; acid arsenius, 1-20 gr.; ext. aconite, ½ gr., or the same with the addition of ¼ gr. of morph. sulph. The diet must be full, generous and nutritious, the sun bath and pure fresh air.

The local treatment consists of anodyne liniments, composed of tincture of opium, chloroform and tincture of aconite or of tincture of veratria, the application of blisters along the course of the

nerve. The latest local application is the application of the menthol pencil. Electricity is rapidly assuming an important place in the therapeutics of this disease; the best form is that of the primary galvanic current, which should be applied for at least thirty minutes, and should be repeated daily for several weeks. Sometimes the pain is so severe that the hypodermic injection of solution of morphia or, of Batley's sedative solution is demanded. It should if possible, be injected along the course of the affected nerve. This patient I have placed on two grains of quinine 3 times a day, and given her iron, in the form of the saccharated carbonate of iron, which is one of the ferruginous preparations which is easily assimilated.

Progress of Science.

TREATMENT OF ACUTE INFANTILE BRONCHITIS.*

By J. Lewis Smith, M.D.,

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Infantile bronchitis is probably the most frequent disease which the physician is called upon to treat. It is usually mild and readily controlled by proper remedies, but in other instances, especially when neglected or improperly treated, it becomes by extension downward to the minute bronchial tubes, or to them and the alveoli, one of the most fatal maladies of infancy. It is, therefore, very important that bronchitis in the infant receive timely and proper treatment.

A brief glance at the clinical history of this malady will help to a correct knowledge of its therapeutic requirements. Acute bronchitis is in most instances preceded, and in its first stages accompanied, by coryza, which first arrests the attention of the parents, but within a day or two the inflammation extends to the larger bronchial tubes, and is announced by a cough. The bronchitis is often limited to these tubes throughout the attack, under which circumstances it is so mild that treatment is scarcely required, but between this mild disease and that severe form in which the minute bronchial tubes are involved, there is every grade of severity.

Bronchitis in the infant is primary or secondary. Two diseases are always accompanied by it, in a form so severe that the cough which it causes is a prominent symptom in each, to wit, measles and pertussis. It occurs also in a mild form in typhoid fever, and is present in tuberculosis, and in many cases of diphtheria. It requires, in a measure, different remedies according to the conditions in which it occurs, but the treatment may be most conveniently considered under the two headings of mild and severe bronchitis.

Bronchitis can probably be aborted or rendered milder in some instances by an emetic employed when the first symptoms appear. Its effect is more certain if the patient drink warm water at the same time, and take a warm foot bath or general bath. The syrup of ipecacuanha is perhaps the best medicine for this purpose. It promotes bronchial secretion and diminishes the force of the circulation. But ordinarily the physician is not summoned until the bronchitis is established, and measures designed to abort it are inadequate.

Treatment of mild Bronchitis. The inflammation is limited to the larger tubes, or to these and those of medium size; if to the larger tubes, it gives little inconvenience, and often passes off without treatment. The patient is said to have a cold. In mild bronchitis, the respiration is but slightly accelerated, the temperature not above 102°, the cough not painful, or attended by a slight degree of soreness in the upper sternal region; the thirst is moderate, and the appetite not notably diminished.

In this form of bronchitis, in which there is no increase of symptoms from day to day, demulcent and mild expectorant medicines are sufficient to cure the disease. Even domestic remedies are sufficient. It is of such cases that the late Dr. James Jackson, of Boston, in his advice to a young physician, wrote as follows; "For young children I employ the following: Take of either almond or olive oil, of syrup of squills of any agreeable syrup and of mucilage of gum-acacia, equal parts, and mix them. Of this mixture, a teaspoonful may be given to a child two years of age, a little less, if younger, and increase if older, so as to double the dose to one in the sixth year."

Of the mixtures officinal in our pharmacopœia, the mistura glycyrrhizæ composita is perhaps the best for mild bronchitis, and it is largely used. It is beneficial not only in the primary disease, but in the secondary or symptomactic bronchitis of measles and pertussis. The small amount of tartrate of antimony and potassium which it contains, $\frac{1}{64}$ grain to the drachm, has a slight sedative effect on the action of the heart without causing nausea, and it promotes expectoration. The paregoric in this mixture being one part to eight, is useful if the infant be restless, and deprived of the needed sleep. A patient of one year can take one-third of a teaspoonful, and one of two years half a teaspoonful, every two to four hours. The syrupus ipecacuanhæ compositus of the French pharmacopœia is also one of the most beneficial remedies for mild bronchitis. It is slightly laxative, and it produces no narcotic effect. It consists of the ipecacuanha and senega roots, thyme, the blossoms of the red poppy, which I believe are not narcotic, orange-flower water, white wine, sugar and a small amount of sulphate of magnesium. An infant of eight months can take half a tea-

* Read before the Section of Obstetrics and Diseases of Children, New York Academy of Medicine, January 28, 1886.

spoonful every second hour, and one of eighteen months or two years one teaspoonful every second or third hour. I have prescribed this syrup during the last two years, and mothers who have observed its effects have commended it. As is seen from its composition, it promotes expectoration without any of the ill effects which sometimes result from the use of those mixtures which contain opiates. If it were introduced into our pharmacopœia it would probably be largely used in this country.

If the temperature rise to 102° or above with the respiration in a corresponding degree accelerated, the cough painful, and the pulse frequent and strong, indicating extension downward of the inflammation, the following prescription I have found useful:

℞.—Spts. ætheris nitrosi,
Syrupi ipecacuanhæ aa ʒ ij
Ol. ricini . . . . . ʒ ii
Syr. bal. tolut . . . . . ℥ j.—M.

Sig. Shake bottle, and give half a teaspoonful to an infant of one year; one teaspooonful to an infant of two years.

Mild bronchitis, with the use of such remedies as have been mentioned and with the external treatment of the chest which will be described hereafter, gradually abates in most instances. But the physician should be prepared for the other alternative, namely, an increase in the severity of the symptoms by extension of the inflammation to the smaller tubes, and the change of a mild into a severe bronchitis.

Severe or grave Bronchitis. The inflammation has extended to the minute bronchial tubes: the mucous membrane of these tubes is hyperæmic and swollen, and actively secreting. On account of the small size of the tubes, many of them become occluded by muco-pus, which acts as a ball-valve, allowing the escape of air upward from the alveoli, but preventing its entrance into them. Hence the alveoli connecting with these closed bronchioles become less and less distended with air, undergoing partial collapse, and some of them pass into a state of complete atelectasis. This occurs most frequently in the posterior and depending portions of the lungs.

Another equally serious pulmonary complication often occurs. I refer to catarrhal pneumonia. The inflammation in its progress downward in the most severe forms of the disease passes from the bronchioles to the adjacent alveoli, usually in more places than one. With the occurrence of this complication, the symptoms are aggravated, the suffering increased, and the prognosis is obviously the more unfavorable the greater the extent of this complication. Broncho-pneumonia thus occurring is indeed one of the most dangerous diseases of infancy, and one that requires the utmost vigilance on the part of the physician, and the most skilful use of remedies, to save the life of the patient. The respiration in severe bronchitis is greatly accelerated, numbering 60, 80, or even 100 or more per minute, and each inspiration is usually accompanied by a moan. The pulse is in a corresponding degree accelerated, and is often feeble; the countenance is anxious and indicative of suffering, and the patient restless.

In this form of bronchitis the indications for treatment are: 2. To promote expectoration, and prevent clogging of the tubes; 1 To diminish the inflammation, and prevent its extension; 3. To strengthen the action of the heart and prevent exhaustion.

In employing measures to fulfil the first indication it should be borne in mind that the cough is useful as the only means of expelling the mucus, and that patients never do well with severe bronchitis that do not cough often. When asked by parents to prescribe something to diminish the cough, I inform them that the safety of patient depends on the strength and frequency of this symptom, and that it would be dangerous to put a stop to it by the use of opiate or other medicines, and I now very seldom combine an opiate with the cough mixture for severe infantile bronchitis. If the infant be allowed to cough every five or ten minutes, and the cough be rendered as loose as possible by appropriate remedies, it will do better, according to my observations, than when the cough occurs at longer intervals. If it requires sleep, I give medicine separately once or twice daily, as in the following formula for a child of one year:

℞—Liq. opii compositi (Squibb's) . gr. xij.
Potassii bromidi . . . . . ʒ j.
Syr. rubi idæi (raspberry) . . ℥ ss.
Aquæ . . . . . ℥ iss.—M.

Sig. Dose, one teaspoonful.

I have seen much harm done by employing stupefying agents which, while they produce sleep, also cause suspension of the cough, upon the strength and frequency of which the safety of the infant depends. The very prevalent opinion among the laity that the cough does no good to the infant unless mucus is ejected from the mouth, needs to be corrected. In order to obtain their full co-operation, I often find it beneficial to explain to the mother or nurse the process of expectoration in the infant, so that they understand that the tubes are freed from mucus as effectually when it is swallowed, after the cough, as when it is received upon the handkerchief.

Among the agents to fulfil the first indication mentioned above—that of promoting expectoration with the least possible loss of strength—the first place must be given to the ammonium salts; of which the two in common use are the carbonate and muriate. The carbonate is both a stimulant and expectorant, but its irritating property is such that it should not be prescribed in a larger dose than one grain to the drachm; a larger dose frequently repeated may produce gastritis, especially if there be little food in the stomach. It has been known to produce gastritis in animals when administered in considerable quantity, and its

irritating action on the fauces can be noticed by any one who swallows a solution of two or three grains to the drachm. The Curator of the Foundling Asylum has noticed in the cadaver the ill effects of the more irritating ammonium preparations. In one instance in which the aromatic spirits of ammonia had been employed, it was supposed with sufficient dilution, the extent and severity of the gastritis were such that it seemed as if this agent might have hastened the fatal result. The preferable way of employing this valuable agent, to prevent its irritating action upon the stomach, is to prescribe it dissolved in water, and order each dose to be administered in a tablespoonful of milk. The muriate does not possess the irritating property of the carbonate, and it can be safely administered in double or treble the dose of the latter, and at short intervals. It is therefore, I think, to be preferred to the carbonate in most cases of severe bronchitis, except at an advanced stage, when an active stimulant of the heart is required.

In this connection, I will state my conviction that the ammonium salts, whether the carbonate or muriate, are not given in sufficiently frequent doses in the practice of most physicians, in severe forms of the disease which we are now considering. If there be marked dyspnœa, and urgent need that the mucus be expectorated from the tubes which it is obstructing, I think that the effect is better if the dose be administered every half hour instead of every second or third hour. Half-hourly doses are not inconveniently given if the vehicle be milk.

The muriate of ammonium may, like the carbonate, be administered in milk, but the following is with me a favorite formula:

℞.—Ammonii muriat. . . . 3 j.
Syr. bal. tolut. . . . ℥ ij.—M.

Fifteen drops, which contain one grain of the muriate, should be given to an infant of three months, and thirty drops, or two grains, to an infant of six months. Physicians, in my opinion often defer too long the use of the ammonium salts, using for the first days depressing remedies instead. The infant suffering from dyspnœa, and requiring a strong and frequent cough to expel the mucus, may, according to my observations, take the muriate from the first day of the sickness with benefit; and every half hour or hour when it is awake. No harm can result from the use of this agent in frequent doses, and for several days, such as might result from the carbonate.

The ammonium salts tend to increase the frequency of the cough, perhaps by the slight irritation which they produce upon the fauces in the swallowing. The muriate may be employed so long as an expectorant is required, and usually with as much benefit as can be derived from any drug.

As regards the use of those other common expectorants which have long been employed, particulary senega and squills, those have been better observers than myself who have witnessed any marked benefit from them.

It is so necessary, as a means of relieving the dyspnœ, to assist the infant to expel the mucus with which the tubes are clogged, when the respiration is much embarrassed, that an emetic is sometimes proper. One should be selected which causes little exhaustion. The syrup of ipecacuanha may be employed, given with an alcoholic stimulant, as brandy or whiskey. Infants a few months old I have sometimes temporarily relieved by moving with the finger or a swab the mucus that collected upon the fauces. This simple operation produces a forcible cough, and sometimes vomiting by which a large amount of mucus is expelled.

The necessity of sustaining the strength of the patient, and, at the same time, of reducing the fever, has led to the employment of quinine by many, perhaps most, physicians in the treatment of severe infantile bronchitis. I cannot say that I have noticed any marked reduction of temperature from its use in bronchitis or broncho-pneumonia, but it has seemed to me that it has been useful as a heart tonic. Much harm may, however, be done by employing quinine in the treatment of infants, by the use of doses too large. In the adult, according to the sphygmographic observations of Dr. M. Putnam Jacobi, while quinia in a dose of five grains increases the stength of the heart's contraction, a dose of twenty grains enfeebles the contractile power of the heart in a marked degree. According to Stillé and Maisch, "Poisonous doses occasion dyspnœa and noisy respiration, which is also jerking, interrupted, retarded, and finally arrested" (*National Dispensatory*). A dose too large, therefore, would be likely to produce just such symptoms as occur in severe broncho-pneumonia. To an infant aged one year, with this disease, I do not give larger dose than one-half grain to one grain of the sulphate of quinia, every fourth hour, as in the following formula:

℞.—Quiniæ sulphat. . . . . gr.xij.
Ext. glycyrrhiz . . . . . 3 ss.
Syr. pruni Virginiani. . . . . ℥ ij.—Misce.

Quinine, however, administered to an infant is very likely to cause vomiting from its bitterness, a result which I do not regret in the treatment of capillary bronchitis, because it causes the expectoration of considerable mucus. The second or repeated dose is usually not vomited. It is difficult to appreciate the beneficial effects of quinine in this disease, but that it does increase the contractile power of the heart seems probable.

If the temperature rise above 103°, if the infant have a full and strong pulse and flushed face, and if the lungs are not involved, or but slightly inflamed, antipyrin may, according to my experience, be safely administered, in proper dose, and with beneficial effect as regards the febrile movement. It should not be administered at stated intervals, but according to the temperature, so that, perhaps, only one or two doses daily may be sufficient. When the lungs are implicated, and the patient has severe broncho-pneumonia, I have seen such pallor from a single dose of antipyrin, in one instance, that I did not dare to

repeat it. It seems to me, therefore, that there should be a careful discrimination in regard to the cases in which it should be employed, so that, while vigorous infants, with severe bronchitis, without pneumonia, or with but slight pneumonia, are benefited by its use, feeble infants, with weak pulse or with extensive pneumonia, and young infants, incur too great risk to justify the employment of this agent, until its exact therapeutic effects are more clearly ascertained.

When the pulse is becoming more rapid and feeble from the extent and severity of the inflammation, the use of digitalis is indicated as a heart tonic. Not infrequently in severe bronchitis, with the minute tubes clogged with muco-pus, the heart is taxed to the utmost to carry on the circulation. Digitalis may furnish the needed assistance by increasing the contractile power of the ventricles. It is, therefore, an important remedy in a large proportion of cases of this form of bronchitis. Two drops of the tincture of digitalis may be given every second hour to an infant of eighteen months, during three or four days, or longer, if the action of the heart be oppressed so as to require it. But no one of the medicines which I have mentioned is more urgently needed in severe infantile bronchitis than alcoholic stimulation. It may be employed at an early stage when the heart begins to fail, without fear of increasing the inflammation.

A rule with me is to give two or three drops of brandy or whiskey for each month in the age of the infant after the third month. It should be given hourly, or each second hour, by day and by night, when the infant is awake.

Local treatment. The external treatment of infantile bronchitis has changed greatly within the recollection of the older members of the profession. Thirty-five years ago the pernicious teachings of Broussais still had some influence, and the application of one or more leeches to the chest was recommended in the text-books. Leeching did apparently cause some alleviation of the suffering, and, according to my recollection, an easier breathing for a time; but any good which resulted from it was more than counterbalanced by the loss of strength, as indicated by pallor of the countenance and a feebler pulse. It has been properly abandoned during the last twenty-five years, and is not likely to be employed again as a remedial measure. The same may be said of vesication. Under the teaching of the schools and the books, vesication was employed after the bleeding from the leech bites had ceased. Witnessing the restlessness and increase of suffering which the fly-blisters produced, I abandoned its use in the first two or three years of my practice, employing instead the cantharidal collodion, applied in points or small patches, half an inch in diameter, over the anterior part of the chest. It is now many years since I have used the Spanish fly in any of its forms or witnessed its use in the practice of others in infantile bronchitis, and the disrepute into which it has fallen is not to be regretted.

But how shall the chest be treated? Writers mention the benefit derived from revulsive measures applied to the chest. Prof. Henoch, of Berlin, whose opinions have great weight with all who are familiar with his writings, recommends, dry cupping for its revulsive effect. Says he, "Instead of leeches, I now apply wet, and especially dry cups (four to eight, according to the age), as these have at the same time a revulsive effect." The question may be properly asked: Does revulsion do any good? How can producing an afflux of blood to the surface of the chest diminish the severity of the bronchitis, since the bronchial tubes derive their supply of blood from a different branch of the aorta from that which supplies the walls of the chest? However it may be explained, slightly irritating applications which produce moderate redness of the surface of the chest, do seem to assuage in a measure the suffering of the patient, and aid in procuring the needed rest. After observing their effects for many years, I have found no better mode of external treatment for infants under the age of two years, and for all weakly infants whatever their age, than the application of a flaxseed poultice properly prepared. But instruction should be given in the preparation and application of the poultice with all the details which Abernethy was wont to give to his class. A poultice which, in a few hours after its application, lies in a mass upon the epigastrium with the chest bare, does more harm than good. The poultice should be of uniform thickness, of about a line, between two thickness of linen, or thin muslin, and so moist that it wets the hands in holding it. For infants under the age of six months, camphorated oil should be thickly smeared on its under surface; for those between the ages of six and eighteen months, instead of the camphorated oil the flaxseed should be mixed with one-twentieth its weight of pulverized mustard, and for those above the age of eighteen months the mustard should be one-sixteenth part. In all those cases in which the respiration is not only hurried, but painful, and accompanied by a moan, and in which the cough is painful, the whole chest should be covered by two poultices, as thin as mentioned above, one over the anterior and the other over the posterior surface, fastened together over the shoulders, and under the arms by small safety-pins, and covered externally by a snugly fitting oil-silk jacket. The poultices thus made should be reapplied morning and evening. They usually cause redness of the surface without pain, but they have never, in my practice, vesicated. They should be continued during the active period of the inflammation. Repeatedly, I have observed the breathing become easier by their use. At the same time, if the febrile movement be so great that it requires to be reduced, an ice-bag may be placed upon the head, and the hands and forearms be frequently sponged with cool water or alcohol and water.

Cool water dressing applied to the chest has its advocates, and, although I believe that the poultices give most relief to the majority of infants, it does not seem improbable that robust infants over the age of twenty months with high temperature may sometimes obtain relief from its use. Prof. Henoch writes : " I strongly advise hydropathic applications to the chest from the neck to the umbilicus. A napkin or diaper is dipped in water at the temperature of the room, well wrung out, and then placed around the chest, without exercising any compression, so that the arms are free. This is surrounded by a roll of batting, and then covered by a layer of oil-silk or gutta-percha paper." If the temperature be high, this application should be renewed every half hour, and it may be continued several days. If it be renewed at long intervals, its effect is obviously like that of a poultice.

If the patient begins to convalesce, the application to the chest, whether water or the poultice, can soon be omitted, and batting covered with oil-silk be substituted for it. Finally, the position of the infant, when there is marked dyspnœa, indicating extension downward of the inflammation, should be frequently changed, since a change in position tends to prevent pulmonary congestion, and aid the expectoration. If the infant be placed over the shoulder or upon the lap of nurse with face downward, its expectoration is often facilitated. Moisture in the room, as that produced by boiling water, also aids the expectoration, probably by rendering the muco-pus thinner and less viscid. When bronchitis occurs in a constitutional disease, as measles or pertussis, as an element of it, it continues as long as that disease lasts, but it can be made milder or less annoying to the patient by remedies such as those mentioned above.

HEADACHE.*

By Dr. W. R. Chittick.

The study of headache is as interesting as it is difficult. It is a complication that we meet with in the majority of cases, and in many of them it is the most prominent symptom complained of.

The study of this trouble by itself has been neglected, I think, more than any other prominent disorder. If we turn to the text-books for information on the subject we find much less than we wish we could, and when we have done with our search we can sum it all up in a very small space. This may be owing to the little importance which some authors regard the subject, or it may be due to a want of a clear understanding of so really difficult a matter.

Headache is usually a sympathetic disorder. But there are cases where it is a prominent symptom of organic disease.

The main cause of headache is a disordered circulation, or, we might say, a disturbance of the vaso-motor system. Another cause is the presence of some toxic substance in the blood. These with that condition called " nervous " will in a rough way, cover the ground of causes of headache.

But they may be still further divided, and for the sake of convenience I will so consider them.

Congestive Headache is one frequently met with. It is caused by an excessive amount of blood in the head. It is known by a flushed appearance of the face, congested eyeballs, a full, bounding pulse. The pain is throbbing in character, is made worse by stooping or moving the head quickly. There is distension of the arteries going to the head, or there may be a diminution in the calibre of the veins which prevents a return flow of blood through them. This may be due, and I think it is, to some irritation of the nervous centres. A vitiated atmosphere, by reducing the amount of oxygen, and causing a retention of waste product in the blood is often the cause of it. This will sometimes account for those headaches which patients have on awaking in the morning.

Fresh air, cloths rung out of *hot* water, caffeine, bromide of potassium, ergot, digitalis, aconite and other arterial sedatives, are the remedies most useful in this form of headache.

Anæmic headache.—This form of headache is due to a lessened amount of blood circulating through the cerebral arteries. It is usually caused by spasms of the arteries, and may be removed by the horizontal position and such remedies, as will relieve the spasmodic action of the blood vessels. Nitrate of amyl, nitroglycerine, cocaine, codeine, and belladonna, are among those that are the most useful.

Headache due to general anæmia should not be confounded with those due simply to passive anæmia of the brain only. In this disorder there is an impoverished condition of the blood. Persons laboring under this condition of things will often try to do more work than they are capable of, and, therefore, force an illy-nourished and nervous system beyond its capacity.

Anæmic blood is like watered milk—is decreased in nourishing qualities; therefore it is easy to see how an organ like the brain, with its numerous nerves, will suffer when compelled to work on poor food.

Anæmic headache usually effects that part of the head that is nearest the arteries that supply the brain, namely the temples, brow, occipital region, etc.

Iron is of course indicated where there is anæmia. The preparations that I like best are Blaud's pills, made freshly; liquor ferri nitratis, perchloride and persulphate of iron, and last, but not least, Rabuteau's pills.

Headache caused by cerebral exhaustion is probably the most difficult to treat. Cerebral exhaustion is caused by over-work of the brain. This is peculiarly an American difficulty. Men and women will work, worry and wear themselves away in spite

* Read before the Detroit Academy of Medicine.

of all the advice physicians are willing to give them.

Business men are worried by financial troubles; wives are worried about social matters; young men and boys are worried in regard to school and college matters, or perhaps dissipate; girls are asked to do more in schools or shops than is reasonable to ask of a young and developing female. In these days of railroads, telegraph, telephones, fast machinery, and other methods of rapidity and competition, there can be found causes enough for overwork. Whatever the cause the effect produced is annoying and dangerous. The brain is in an irritable condition and forms a central point for general irritation. All sorts of ills, fancies and conditions are produced, and little can be done until the cause is obliterated.

The treatment of such cases is, first, proper food; not only the digestion but the assimilation must be looked after. In the meantime medicine must be administered. The best drugs for this condition are the alkaloid caffeine, (the citrate of caffeine is said to be only a mixture), monobromide of camphor, codeine, nux vomica, quinine, gelsemium, guarana, fluid extract camellia; iron and other tonics.

Intermittent headache is due to some malarial derangement manifested in this manner. Quinine is the most prominent remedy and may be aided by other remedies.

Habitual headache is due to some derangement of the systems usually of the stomach or bowels. When we enter upon the discussion of the so-called "stomach" headache we simply enter upon a discussion of the disorders of digestion. Headache arising from indigestion is sympathetic and reflected through the pneumo-gastric nerve, or is the result of toxic material (ptomaines probably), produced by some fermentative changes in the stomach and taken up in the general circulation. It may be a derangement of the liver that causes the headache; then it is called *bilious* headache and is sometimes very severe. Obstruction to the free escape of bile or interference with the normal functions of the liver—either an increased or diminish secretion are among the causes.

Reflex irritation from *genito-urinary* organs is also a source of headache. This is noticed in some patients about the period of menstruation. In others displacements and disorders will cause pain in the head, usually on the top of the head.

Astigmatism, if not corrected, will almost always cause headache if the eyes be used much. The disturbance in these cases may become so great as to cause disturbance, through the nervous centre of the stomach. Ear troubles also sometimes cause headache, but as I do not recollect treating any cases from this cause, I will have to pass over it.

External pains of the head, often called headache, are due to a variety of causes. Syphilis often causes headache, if the membranes of the brain are affected. Rheumatism of the scalp is often mistaken for headache. Neuralgia of the supraorbital, occipital or auricular nerves is at times very troublesome. These require anti-neuralgic treatment.

A few words on the remedies used in the treatment of headache and I am done. Caffeine is a very valuable remedy in this disorder, but should not be give in doses of more than two grains at a time; large doses are apt to produce nausea.

Codeine has many valuable qualities. It seems to me to have an action like opium and the bromides combined. Its cost, however, ($12.00 per oz.) makes it an expensive drug to use.

Monobromide of camphor, in doses of two to six grains, is excellent for slight nervous headache.

A combination of caffeine and codeine is very good, but do not put monobromide of camphor with them—it will surely produce nausea. Guarana is an excellent remedy for hyperæmic headache and has some advantages over caffeine.

Fluid extract of camellia and of coffee owe their usefulness to the caffeine they contain.

The bromides are probably used more than any other class of remedies in headache. Their use should be confined exclusively to congestive headaches, except where they are used in conjunction with other remedies.

Ergots and digitalis are useful when we wish to tone up the blood-vessel or diminish their calibre, or to steady the action of the heart itself.

Aconite is occasionally indicated when it is necessary to get control of the heart.

Quinine, salicylic acid, opiates, hyoscyamus, belladonna, gelsemium (particularly where there is neuralgia), and nux vomica, are often indicated, and, when used in combination with some of the remedies first mentioned, will add to their effectiveness.

Nitroglycerine in small doses is very useful in headaches due to spasm or anæmia of the brain. Its acts very promptly.

Cocaine, on account of its peculiarly soothing and quieting action, is excellent in headaches due to cerebral exhaustion and other nervous conditions.—*Detroit Lancet.*

Constipation in infants is thus treated by various writers in the *British Medical Journal*:—

Dr. W. R. Cossham has generally found much benefit from ordering the infant to be fed every morning with a cupful of gruel, which may be sweetened with treacle or honey. Further help is obtained by giving a teaspoonful of cod-liver oil twice a day, and using friction over the bowels every night with olive-oil on the palm of the hand. An occasional morning draught may also be necessary, such as tinct. podoph. miij (gr. ii ad ʒ i); pulv. ipec. gr. ¼; glycerini ʒ i; aquam anisi ad ʒ ss.

L. suggests two or three meals of "Mellin's food" daily. He has found this useful, and has long since dispensed with drugs as much as possible in the treatment of some troublesome cases.

If the infant is being nursed, two or three meals a days will be sufficient, and these may be dispensed with as soon as the object is attained, and resumed if necessary ; but if it be living upon artificial food, " Mellin's food " should be substituted.

Mr. E. Gibson Berkley says that the liquid extract of cascara sagrada, combined with minute doses of tincture of nux vomica, and made palatable with a little syrup of lemon or glycerine, will be found very useful. It should be given two or three times a day.

Sign-Post recommends feeding the infants on well-made oatmeal gruel and milk, in proper quantities, and at intervals. For an infant from four to six months old, he advises half the feeding-bottleful of milk, with the same quantity of oatmeal gruel, to be given every four hours. The directions for preparing the gruel are as follows: Take a teaspoonful of the common coarse, but sweet (not bitter), oatmeal; let this soak in a little more than a tumblerful and a half of cold water for some hours, say all night; then place this meal, and the water, in a clean, covered saucepan capable of holding double the quantity of the liquid poured in; place the saucepan near the fire, so as to heat the contents slowly, and after a time place it on the fire, and stir the contents, until, and for a minute or so after, it boils; then pour the contents on to a horse-hair sieve ; the creamy gruel is made.

Mr. M. F. Bush advises a spill of paper dipped in castor-oil about two or three inches, and inserted into the lower bowel. It should be used every day for a time.

ON THE TREATMENT OF FURUNCLES.

THE *Boston Medical and Surgical Journal* (*Medical Age*) writes:

Gingeot has contributed to the *Bulletin Général de Thérapeutique* (t. cviii.) a valuable series of articles on the treatment of boils and carbuncles, of which the following is a summary:

Brodie, in his lectures on pathology, published in 1846, advanced the view that the furuncle was a species of eruption analogous to smallpox, and a local expression of a poison circulating in the blood. Alphonsé Guerin, in the article Anthrax in "Jaccoud's Dictionary" (1865), teaches that furunculosis is a septicemia, and assigns to it an intermediate position between the general affections which localize themselves, and those which, becoming generalized, result from a lesion primarily local.

The contagiousness of furunculosis was established by Startin in 1866. He proved (1) the auto-inoculation of the contagium by scratching ; (2) the transmission from individual to individual by contact (as by occupation of the same bed) ; (3) the development of boils on the hands of surgeons and dressers consecutively to their being wounded with a bistoury which had been used in opening a furuncle. Lannelongue inoculates patients with matter from boils, producing at the point of puncture furunculous eruptions.

It is not only proved that boils and carbuncles can be transmited from man to man by contagion, but the active principle of the contagion, according to Gingeot, has been discovered. For this discovery we are indebted to Pasteur, who, on applying to the furunculous affection the same means of study as had been applied by him to the investigation of the pathogeny of splenic fever, fowl cholera, and other virulent diseases, " has been able to demonstrate that every furuncle contains certain microscopic parasites, and that it is to these that there are due the local inflammation and the pus formation. " This microbe is called by Pasteur the torula pyogenica; this mycologist, moreover, identifies this bacterium with that of abscesses of the soft parts, of osteomyelitis, and of puerperal fever; certain it is, however, that the product of cultures of furunculous origin has never given rise, by inoculation in animals, to anything but simple abscesses, never to furuncles. Gingeot explains this fact by referring to the peculiarity of the tissue, namely the glandular apparatus of the skin (and especially the pilo-sebaceous glands), where the furuncle has its seat; the inoculation of the microbe would have a different result according as such inoculation were made into a follicle, or into the subcutaneous cellular tissue. M. Lowenberg has repeated Pasteur's cultures and inoculation experiments, and has confirmed them ; he has also shown the part played by hairs in the collection of germs. The view which he adopts, and which Gingeot indorses, makes furunculosis a parasitic disease resembling scabies, and the old humoral notions respecting the etiology of boils and carbuncles are repudiated. It is, however, certain that furunculosis is attached by many bonds of union to the other virulent affections. A certain predisposition of constitution is necessary ; the torula does not thrive unless it finds a favorable medium. This predisposition is found in certain debilitated states of the economy from overwork, alcoholism, diabetes, lithemia, etc., in which there is such modification of the secretions of the skin as renders the piliferous and sebaceous glands a suitable habitat for the torula pyogenica.

The indications of treatment are: (1), if possible, to cause the furuncles to abort ; (2) this indication being impossible of fulfillment, to moderate the amount of suppuration ; (3) to antagonize the constitutional condition which favors furunculous productions.

There are two principles laid down as the fruit of large experience: first, never to open early ; second, seldom or never to open, even if suppuration has taken place, but to leave the boil or carbuncle to nature. Since the furuncle is a parasitic affection, the essence of the treatment ought to consist in destruction of the parasite. One of the first precepts is to apply no poultices. Even when put on cold, the poultice has no power to stay the

development of the furuncle, and when warm it can only favor such development, as heat and moisture promote the vital activity of the lower organisms; moreover, the organic substances of which the poultice is made furnish a contingent of food to the parasite. Even when the boil has gone on to suppuration, the poultice is rather injurious than otherwise, aiding the penetration of new follicles by the microbe, by spreading the pus over the skin and keeping it in contact with the glandular orifices dilated by the heat.

One of the external remedies likely to be most successful in the abortive treatment of furuncle, and which Gingeot highly recommends, is the tincture of camphor. Both the alcohol and camphor in this preparation are excellent parasiticides. The camphorated spirit is applied to the part by means of a compress, and allowed to remain in contact with the skin for a few minutes. Thus treated, boils, if taken at the commencement, are frequently made to abort. The application should be made three or four times a day.

Another good agent for fulfilling the same indication is tincture of iodine, which should be painted freely several times a day over the furuncle and a little beyond. If applied till epidermic desquamation takes place, the iodine tincture does no harm, and if it does not always prevent, it certainly moderates, suppuration, thus fulfilling the second indication and better than (perhaps) any other remedy. Gingeot believes that the iodine does good by its superlative parasiticide action; "the parasites can not escape contact with the liquid, which is introduced by capillarity into the glands, and by endosmosis into the acuminated vesicles of the top of the furuncle."

The same treatment is applicable in the early stage of carbuncle, and will often arrest its development; if, however, the progress of the carbuncle can not be stayed, a strong solution of carbolic acid (equal parts of the strong acid and glycerin) must be brought in contact with the diseased tissue, as Dr. Eade, of London, recommends.

The central cord or stem must be destroyed; this may be done by freely applying the carbolic acid through any opening which may exist in the center of the swelling, or a sufficient opening may be made with acid nitrate of mercury.

When the furuncle is opened and discharging, the usefulness of tincture of iodine is ended. Then there is nothing better than boric acid applied in the form of fine powder, which is freely dusted over the boils, or of the saturated aqueous or alcoholic solution which is kept constantly in contact with the diseased parts by means of compresses soaked in the liquid.

As for internal medication, Gingeot has nothing better to suggest than the recommendation to follow out the line of treatment several years ago indicated by Dr. Sidney Ringer, and indorsed by Dr. Duncan Bulkley. This consists "in the administration from the first of sulphide of calcium in small doses (one-sixth or one-fourth grain) every two hours. It is worthy of note that in the excellent paper which Dr. Bulkley read at this meeting, he coincides very nearly with the line of treatment above briefly summarized.—*Cincinnati Medical News.*

DIARRHŒA AND DYSENTERY IN CHILDREN.

Diarrhœa in children is an increase in the frequency and amount of the alvine evacuations, with a thin or watery character, and admixture of fecal lumps, undigested food, and, perhaps, mucus. In children under one year the cause is often in the state of health or habits of the mother or nurse, from a faulty method of feeding, or resulting from cold or dampness. In children over one year the cause will be either dentition or errors of diet. Impure air or the direct effect of a high temperature in summer, may be considered as causative conditions. We may distinguish several varieties—Simple: where there is only a moderate increase in the frequency, amount and fluidity of the normal dejecta. Lienteric: the discharges similar to the preceding, but containing considerable portions of undigested food; occurring mostly in children badly fed, and pointing to an imperfect digestion. Choleraic; the passages very thin and squirted from the anus as if from a syringe; these discharges do not have the normal acid odor, but are usually fetid, and have an alkaline reaction—the so-called cholera infantum. Mucous diarrhœa: the passages containing considerable mucus, some times streaks of blood, and attended with pain. These different varieties are more or less blended in most cases. Stools possessing a putrid odor indicate involvement of the mesenteric glands, and such cases usually terminate fatally. Bad methods of nursing or feeding are responsible, more than all other preventable causes combined, for the prevalence of summer diarrhœa. If a mother cannot suckle her infant, it is best to provide a wet nurse. When a wet nurse cannot be employed, milk is the only suitable food for young infants. It should be diluted with from one-half to one-fifth part of water, for infants under a year old, and add fifteen grains or half a teaspoonful of soda to each pint, which prevents the caseine from forming in such hard coagula and neutralizes any acidity which may have developed; or a tablespoonful or two of lime water may be used instead. It is well to test the milk with litmus paper as a guide to the quantity of soda or lime water to be added. In the case of children with very weak digestion, from five to ten grains of pancreatin may be added, first dissolving it in a little water, and giving the milk blood-warm. If, notwithstanding this, curds are vomited, or three-quarters pass through, the milk may be disgested half an hour with pepsin at a temperature of about 100°, then strained through a fine sieve, and the whey given with or without a portion of the finely divided curd. It is best to sweeten the

milk with sugar of milk. In some cases of diarrhœa attended with vomiting, the white of an egg, diffused in a pint of water, will be well retained and afford a grateful and nutritious drink. The doctor has no great confidence in infants' foods. If cow's milk will not agree, he tries condensed milk, and alternates it with some of the semifarinaceous food in children three or four months old. Nestle's milk food he has found as reliable as any of its class. In the simpler forms of diarrhœa, a few doses of gray powder will often be the only remedy required. Calomel in small and frequent doses will be useful in case the discharge is devoid of coloring matter (white or chylous diarrhœa). No mercurial should be long continued. Lienteric diarrhœa, pointing to disorder of the primary digestion, will be benefited by nux vomica, drop-doses or less of the tincture. Green or mucous passages, with much griping, will find an appropriate remedy in ipecac in doses short of an emetic effect. Watery passages with pain and sleeplessness will be well met by a few efficient doses of Dover's powder combined with bismuth. Whiskey should be given when there is prostration. The doctor likewise uses a trituration of liquor arsenicalis, 1-100 to 1-200 grain to the dose, in great loss of vital powder. Where the nervous system is much disturbed, the doctor gives veratrum album, from one quarter to two drops every hour, with good results. Teaspoonful-doses of camphor water are good at the onset of a severe attack with liquid stools. Dysentery is more severe and dangerous than ordinary diarrhœa. It is often preceded for a day or two by malaise, fever, and dyspeptic trouble; then the bowels act more frequently and loosely than usual, and soon the passages become bloody and slimy. The classic treatment of opiates and laxatives will suffice for a cure in a majority of cases, but success will depend largely upon their judicious employment.—*American Journal Obstetrics.*

THE TREATMENT OF PROFUSE HÆMOPTYSIS.

In discussing the treatment of hæmoptysis, of course only the cases in which the hemorrhage is profuse need to be considered, for slight hæmoptysis requires no definite treatment. In the treatment of the serious form the general methods employed must be the same as that for profuse hemorrhage from other parts of the body; and although containing no new points, the paper recently read by Dr. Samuel West before the Medical Society of London (*Brit. Med. Journ.*, January 16, 1886) contains the most successful methods, brought together in such a succinct way that it is worthy of being laid before our readers. Dr. West shows that rest, absolute of the body as a whole and of the diseased part so far as possible, is the main essential principle; and with this object in view the patient should be kept in a recumbent position, speaking prohibited, cough checked, and excitement avoided, or, if present, controlled by drugs. These indications are best met by the use of opium, which Dr. West regards as indispensable in most cases of hæmoptysis. Of the so-called hæmostatic remedies two groups may be formed,—the topical astringents and the vascular constringents. Chief among the former are the perchloride of iron, alum, gallic and tannic acids, and acetate of lead; but, powerfully as these remedies act when applied to the bleeding surface, it is difficult to see how they can produce the same local effect when administered by the mouth, for it is hard to comprehend how a few minims of dilute solution introduced into the stomach can produce an effect which the undiluted solution can effect only when applied directly to the bleeding surface; consequently, if they act at all, it must be by producing vascular constriction. Of the groups of remedies which produce vascular contraction, digitalis and ergot are the most prominent examples. Both of these drugs produce contraction of the peripheral arteries, and if hæmoptysis were due to capillary oozing they might possibly arrest the hemorrhage; but we know that hæmoptysis is not due to capillary oozing, but to lesions of fairly large vessels. Hence these remedies, instead of being useful, may be even dangerous, and increase the hemorrhage. Hæmoptysis always tends to stop itself, from the fact that the blood-pressure is reduced from the loss of blood, and the greater the reduction the greater is the tendency to form a clot. This fact has long been recognized, and therefore one of the early standard methods of treatment of hæmoptysis was to produce hemorrhage from other parts by free blood-letting; and although blood-letting is now believed to be indicated in but very few cases, an attempt may be made to reach this end, not by removing the blood from the body, but by detaining it in some part of the body distant from the seat of the hemorrhage. This may be, to a certain extent, accomplished by extensive dry cupping, or by dilating some of the vast vascular systems of the body, and making them act as temporary reservoirs for the blood. This might possibly be accomplished by producing purgation, or the cutaneous system might possibly be dilated through pilocarpine, or even nitrite of amyl; however, the possible objection to the use of these drugs is they dilate the vessels of the lungs as well. Then, again, the blood-pressure may be influenced through the heart, as by use of cardiac depressants, of which antimony is the most reliable; while, lastly, diet is of the very greatest importance. The principle of absolute rest and restricted diet should be applied in all cases of hemorrhage. It is thus seen that without giving a long list of drugs, or discussing in detail the various methods of treatment of hæmoptysis, Dr. West indicates the conditions which have to be fulfilled and the essential principles which should guide our choice of remedies. Our treatment of hæmoptysis is as yet extremely unsatisfactory, and perhaps the

following out of some of the lines of treatment suggested above may lead to valuable results:

EXPERIMENTS WITH NUMEROUS DRUGS ON THE BACILLUS TUBERCULOSIS.

If Koch's bacillus tuberculosis is actually the cause or infectious agent of tuberculosis, the labors of Sormani and Bognatelli to ascertain the effect of various drugs on the microbe are in the right direction to possibly advance the therapeutic aspects of this affection. We abstract from their papers, "Ricerche Sperimentali sui Neutralizzanti del Bacillo Tuberculare a Scopo Profilatico" and "Ulteriori Ricerche sui Neutr. del Bac. Tuberc.," Milano, 1885, simply their general conclusions.

Both authors tested a number of chemicals, especially such which could be therapeutically considered as to their influence upon the vitality of bacillus tuberculosis. One c. c. (16 gtt.) of sputum, in which the presence of a large number of bacilli was previously ascertained, was, under the ordinary precautions, mixed with a certain quantity of the drug to be tested, the mixture preserved at a temperature of 35° to 40° (C.) one to two hours, then mixed again, and by means of a disinfected syringe injected in the abdominal cavity of guinea-pigs. These animals, unless they died sooner, were killed after two or three months and examined for bacilli. A large number of drugs showed no or a very slight pertinent action. An appreciable antibacillar effect was obtained from the following drugs in an ascending order: lactic acid, camphor, bromide of ethyl, napthol, turpentine, chloride of palladium, creasote, carbolic acid, and corrosive sublimate. The following drugs showed likewise some antibacillar virtues; benzine, toluol, oil of carraway, essence of cloves, guajak, chinolin, menthol, and creasote.

THE MANAGEMENT OF PLACENTA PRÆVIA.

Dr. Malcolm MacLean offers the following rules as those which should best govern the treatment of placenta prævia (*Amer. Journ. Obstetrics*, March, 1886):

First.—In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest,—body and mind,—and a mild opiate is often desirable at this stage to quiet irritation.

Second.—Inasmuch as the dangers from hemorrhage are greater than all else to both mother and child, at the earliest moment preparations should be made to induce premature labor; and labor being once started, the case should be closely watched to its termination by the accoucheur.

Third.—In primiparæ, and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

Fourth.—In the majority of cases generally, and in all cases especially where there is reason to believe that rapid delivery may be required, it is more safe to rely upon the thorough continuous hydrostatic pressure of a Barnes's dilator than on pressure by the fœtal parts.

Fifth.—Where the implantation is only lateral or partial, and where there is no object in hurrying the labor, bipolar version, drawing down a foot and leaving one thigh to occlude and dilate the os, may be practised according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

Sixth.—The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

Seventh.—In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

Eighth.—In some cases, in the absence of sufficient assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions and the voluntary efforts of the mother. In case of favorable presentation,—occiput or breech,—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and child will be expelled rapidly and safely without artificial assistance.

Ninth.—The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

Tenth.—Whenever it is possible, dilatation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

Finally.—As cases of placenta prævia offer special dangers from post-partum hemorrhages, septicæmia, etc., the greatest care must be exercised in every detail of operation and nursing to avoid conveying septic material to the system of the mother.

Absolute cleanliness, rather than chemical substitutes for that virtue, should be our constant companion in the practice of the obstetric art.

TREATMENT OF CHANCROID.

The *Journal of Cutaneous and Venereal Diseases* learns the following from its French correspondent. M. Maurice Notta has put forth an article in *L'Union Médicale*, July 18, 1885, treating of the different methods which have been employed for the treatment of simple or non-infecting, non-syphilitic chancre—the chancroid of English and American writers. He divides them into two kinds—one in which only a topical and superficial action is sought to be produced upon the chancroid; and another which aims at its complete destruction from the very base, and its transformation into a simple sore. To the first class belong the applications of aromatic wine, tartrates of iron and pot-

ash, glycerine, dilute tincture of iodine, decoctions of oak or of Peruvian bark, chlorine-water, resorcine oxygenated water, tincture of thuja, guaco, perchloride of iron, sulphate of iron, silicate of potassium, chloral; also of absorbent powders, such as those composed of calomel, bismuth, camphor, oxide of zinc, quinine or ratanhia. All these agents may produce good results, but they are less efficacious than those which constitute the second class. A soft chancre may be destroyed either by excision, which is scarcely ever an advisable procedure, or by cauterization, the means usually adopted. Formerly, the arsenical preparations, Ricord's sulphocarbolated, Vienna paste, acids more or less diluted, etc., were made use of for this purpose. In France, at present, we employ a solution of nitrate of silver, 1.30, bichloride of zinc, in the form of pate de Canquoin, or a concentrated solution of iodoform—this last having been brought into favor by MM. Besnier and Lailler in 1867—salicylic acid combined either with wheat flour or with powdered gum (one part of salicylic acid to four parts of excipient); pyrogallic acid, 1.5 (Vidal); finally, the thermo-cautery. Quite recently, M. Aubert, at Lyons, has resorted, with success, to the administration of prolonged hot baths; and I have myself effected cures of phagedenic soft chancres by means of very hot cataplasms repeatedly applied. According to M. Aubert, a temperature of 38° C., if maintained long enough, will suffice to modify the chancrous poison, and transfer the virulent ulcer into a simple sore. M. Notta believes that the most efficacious method hitherto devised consists in the complete and simultaneous cauterization of all the patient's soft chancres by means of the thermo-cautery, followed by an antiseptic dressing. I refrain from further details on this subject, since the management of chancroid is so admirably treated in the last edition of Bumstead and Taylor.

A NEW METHOD FOR THE REMOVAL OF FOREIGN BODIES FROM THE NOSE.

Dr. D. Bryson Delavan, of New York, writes to the *New York Med. Record* for January 23, 1886, as follows: "The presence of a foreign body in the nasal cavity is usually attended with marked swelling of the neighboring mucous membrane. Its extraction by any of the means in common use is accompanied with pain, often of great severity, and is often followed by a copious hemorrhage. The swelling offers, of course, a serious obstacle to the extrusion of a hard body, while one which has increased in size from the imbibition of water becomes all the more firmly impacted. Hence, in attempting the removal of the body, more or less laceration of the membrane is likely to occur. The pain, with difficulty tolerated by an adult, causes a child to become in almost every instance unmanageable, so that an anæsthetic is required. The hemorrhage is usually controllable after the lapse of a few minutes, but may, meanwhile, cause considerable annoyance. From our knowledge of the physiological action of cocaine upon the nasal mucous membrane, it is evident that, by its use in these cases, all the above difficulties may be overcome; for applied to the nose, the mucous membrane becomes strongly retracted, the sensibility to pain lost, and the blood-vessels exsanguinated. Thus the calibre of the fossa is greatly widened, the irritation and consequent resistance done away with, hemorrhage prevented, and the removal of the foreign body thereby greatly facilitated. To carry out the method, the occluded nostril should first be cleansed with a spray or a gentle current of some lukewarm alkaline solution, after which a four per cent. solution of cocaine should be applied to the mucous membrane. When its effect has become complete, the extrusion of the body should be attempted by directing the patient to blow forcibly through the affected nostril. Failing in this, it should be drawn out by some suitable instrument. Should the patient be too restless to make this practicable, an anæsthetic may still be administered. In cases of invasion of the frontal sinus or antrum of Highmore by insects or larvæ, cocaine should be applied to the membrane before the administration of chloroform or ether, in order that the canals leading to these cavities may become as patent as possible, and thus the vapor of the anæsthetic be admitted very thoroughly to the intruder's presence. The insensitiveness of the membrane produced by the cocaine will, in these cases, certainly add to the comfort of the sufferer should it be necessary to inject, or, still better, to spray the nose with chloroform."

THE PREVENTION OF BALDNESS.

It has been estimated that one-half the adult men of American birth living in our cities are bald-headed. The estimate is not exaggerated, if it is applied to persons above the age of thirty, and it may be rather under the mark. If, now, it be conceded that one-half of our American business and professional men are bald at the present time, it would be interesting to speculate as to the condition of the heads of their descendants some hundreds of years from now. The probabilities point towards a race of hairless Americans, for baldness is extremely liable to be propagated in the male line, and to appear a little earlier in each generation. The American nation is threatened with the catastrophe of a universal alopecia.

It appears to be worth while, therefore to, consider the subject of prevention, since no means have yet been found for the cure. Why are so many men bald before their time?

The answer has almost always been that it is due to the excessive strain and ceaseless mental and physical activity to which American methods of business and modes of living conduce. From the visitors' gallery of the Stock Exchange, for example, one views a mob of shining pates belonging, as a rule, to rather young men.

Any reformer, however, who expects to prevent baldness by changing American habits may as well stop at once, for he will surely fail. Now, there may be, perhaps, help in some other quarter. The sons of prematurely bald fathers should bear in mind that if they wish to save their hair it will only be through industrious attention to their scalp. This much-neglected surface should be thoroughly cleansed at certain intervals. It should be carefully and regularly examined, and if it be unhealthy, dry, and scurfy, the proper applications should be made to it. The wearing of unventilated hats is one of the greatest sources of failure of nutrition of the hair, and these must be avoided. The beard never falls out, because it gets plenty of sunlight and air. These are what the hair of the scalp needs, also. Women are less bald than men, because, for one reason, their scalps are better ventilated. In fine, civilization has made the hair producing organs of the scalp delicate and feeble. They have to be nursed and cared for, or they atrophy and disappear. Young Americans who do not wish to lose their hair before they are forty must begin to look after their scalps before they are twenty.—*New York Med. Record*, January 23, 1886.

VACCINATION.

A week or so ago, in looking over the morning paper, our eye caught sight of a paragraph stating that a riot had occurred in a city in Lower Canada, in consequence of an attempt on the part of the authorities to enforce general vaccination. Some two hundred men had assembled together, and declared that under no circumstances would they submit to this protective operation.

The prevalence of such a sentiment as this explains at once the unusual fact of a summer epidemic of small-pox in Montreal and adjacent Canadian territory. We unhesitatingly say that wherever small-pox prevails in this age of the world it casts a sombre light on the civilization of that place and nation. It proves that the people are ignorant, negligent, or blindly bigoted; it shows that the authorities are feeble, or blind to their duties; it reveals a condition of intellectual darkness which is far behind what should be the average of the last quarter of the nineteenth century.

Were the precautions taken which all physicians and intelligent laymen are equally familiar with, epidemics of small-pox would never occur again. These precautions are all summed up in the word, *vaccination*,—vaccination with pure virus, preferably that derived directly from the cow, repeated often enough to render it certain that the vaccinated person is wholly unsusceptible to the specific action of the virus. This is all, and this is enough. Long personal observation, including a period during the war, when we had charge of a small-pox hospital, and in camps where small-pox appeared in a malignant form, has impressed most incisively upon us the belief that vaccination, properly carried out, will conquer and prevent any epidemic of the disease, even under circumstances most favorable to its dissemination. Perhaps it will not eradicate it; but it will certainly reduce it to the level of one of the least to be dreaded of diseases which occasionally involve a fatal issue, and will positively prevent epidemics like this one in Montreal.

We urge, therefore, all physicians, all Boards of Health, all sanitary bodies, all intelligent laymen, to advocate frequent, and, if necessary, obligatory vaccination.

There is now not the slightest difficulty in procuring an abundant supply of pure vaccine matter. The methods of obtaining it from the animals have been carefully studied, and are nowhere carried out with more scrupulous and successful care than by those physicians in our own country who have devoted their attention to supplying this product. We should recommend that the virus be obtained directly from them or their agents, rather than through trade channels, as more than one instance has been creditably reported to us where the latter supplied humanized instead of pure animal virus.—*Phil. Med. & Surg. Reporter.*

CHIENE'S CONTRIBUTIONS TO PRACTICAL SURGERY.

Prof. John Chiene, in an admirable series of practical notes on every-day surgery, makes *inter alia*, the following suggestions:

In wounds of the face, the best stitch to use is horse-hair. Unless the wound is of considerable size, no form of drainage is necessary. The best dressing is a pad of salicylic cotton-wool, or corrosive wool, fixed in position with flexible collodion.

The introduction of the sharp spoon into surgical practice has greatly simplified the treatment of lupus. In the use of the sharp spoon, special care must be taken to scrape away the raised edges of the lupoid ulcer, as it is here that the pathological change is advancing. This is best done by scraping from the sound skin toward the centre of the ulcer. After the new formation is completely removed the best application is a powder which has been introduced into surgical practice by Dr. Mucas Championière, of Paris. It consists of (1) light carbonate of magnesia, which has been impregnated with the vapor of eucalyptus, (2) powdered benzoine, and (3) iodoform in equal quantities.

In persistent hemorrhage from the nasal cavity, plugging of the posterior nares should not be done until an attempt has been made to check the the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which

forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in the attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity the clot consolidates in position, and the hemorrhage is checked.

In the reduction of a dislocation of the lower jaw, the patient should be seated on a low stool before the surgeon, in this way the surgeon gets a sufficient leverage, standing above the patient, and the reduction of the dislocation is simplified.

In the division of a tight frænum of the tongue, when a child is tongue-tied, care must be taken not to use the scissors too freely. All that is necessary is, standing behind the patient, to nick the anterior edge of the frænum with the scissors, and to tear with the finger-nail the remainder of the band. In this way hemorrhage, which is apt to be troublesome, is prevented.

In the removal of an elongated uvula after you have grasped the apex of the uvula, it is to be drawn forward and rendered tense before division. If it is simply grasped, and an attempt made to divide it in its normal position, it is not always an easy matter to effect the object desired. When it is rendered tense the operation is a very simple one. —*Edin. Med. Jour.*

NITRO-GLYCERIN IN THE COLD STAGE OF INTERMITTENT FEVER.

Dr. Charles Weil.—Articles on the therapeutic uses of nitro-glycerin, or glonoinum, have been quite numerous since its revival and application in disease, angina pectoris in particular, in which affection it has been used with remarkable success since its first employment by that distinguished investigator, Dr. William Murrel, of London. But in no article has the writer seen it recommended as a prompt and efficient remedial agent in the cold stage of intermittent fever, which it cuts short at once, as does morphine, for instance, or chloroform. I have employed it for this purpose in four differeut cases so far, with the desired result in each one, and without any unpleasant effect, aside from a little ringing or buzzing in the ears, which, as we all know, is part of the physiological action of this agent. The last case in which I used it was that of Mrs. L. F. G., a stout, married lady, twenty-six years of age. Under the greater part of the house in which she resides there was a pool of water, prior to the sewerage which has since been laid in the street. I was hastily summoned at about 7.30 o'clock in the morning of November 30th last, and found her covered with blankets, and with chattering teeth, in the cold stage of an intermittent fever. I gave her a hypodermic injection of morphine, which almost immediately cut the attack short. As she could not take quinine in any form, on account of an annoying eruption it would produce, I placed her on liquor potassii arsenitis, gtt. iv. *ter in die.* But this did not act as quinine would doubtless have done, for between 3 and 4 o'clock on the following afternoon she had another attack, which was again relieved by the morphine. After that she was free from all attacks until the 16th of last month, when I was again hastily summoned. I took with me my one per cent. solution of nitro-glycerin, and dissolving gtt. ii, in aquum xv, injected the whole into her arm. It acted as promptly and as efficiently as it did on the previous occasions, or as morphine did.

I would recommend, however, that only one drop be used, instead of two, unless the condition and nature of the patient would warrant more. I would also state that I greatly prefer the solution to the pills which some of the manufacturing chemists have placed on the market; the one per cent. solution in alcohol or ether being the most advisable.

My object in writing this brief article is to call attention to this additional property of glonoin, which the few cases mentioned justify me in claiming for it.—*Therapeutic Gazette.*

PNEUMONIA TREATED BY INTRAPARENCHYMATOUS INJECTIONS.

The *Lancet*, September 5th, says: Boldness may certainly be necessary for success even in the treatment of disease. But what shall we say of Lépine's argument in favor of the local treatment of fibrinous pneumonia by intra-parenchymatous injections? (*L'Union Médical*, August 22d.) If, says Lépine, an injection of a few cubic centimetres of a very weak aqueous solution of corrosive sublimate be made into the hepatized lung on the third or fourth day of the disease, in three or four places equidistant a few centimetres from one another, and preferably at the periphery of the lesion, with a view of preventing the extension of the disease, the following phenomena are observed: (1) At the seat of infection an immediate diminution of the crepitant rales and tubular breath-sounds which are in part replaced by respiratory silence and some larger rales; (2) sometimes, later, a transient exacerbation of the temperature of body; (3) the next day a great improvement in the general conditions, and notably a precocious defervescence; and (4) a resolution which, to judge by the persistence of the "souffle," especially in the hepatized parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the infra-pulmonary injections in the doses employed (20 to 25 cubic centimetres of 1 in 40,000 solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than 3 to 4 centimetres, M. Lépine urges that he has not lost a single patient, and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphia to the solution. After the introduction of the sharp,

needle, and before the syringe is fitted on, a few drops of blood are allowed to escape ; the injection must not be delayed, or the needle will become plugged. When the needle is inserted into healthy lung or into tuberculous lung, it does not as a rule yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy dogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area, which was made up of blood and congestive œdema. The lesions were less marked with the 1 in 40,000 solution.

MASSIVE DOSES OF DIGITALIS IN LOBAR PNEUMONIA.

In the hands of M. Petrescu, Professor of Therapeutics at Bucharest, (*Progrès Médical*) the dosage of digitalis has been carried far beyond the limits formally recognised. The disease under treatment was lobar pneumonia, occurring in one lung or in both, in some cases uncomplicated, in others associated with pleurisy. Some of the cases do not seem to have been severe from the first ; the majority, however, were so. They were taken in hand, as a rule, either on the day of attack, or on the second day of the disease. It is also to be noted that the patients were soldiers in hospital, and therefore presumably men of good physique. The use of large doses of digitalis in pneumonia is not novel. M. Germain Sée has recommended that as large a quantity as seven grains of the leaves be administered per diem in such cases. Hirtz does not consider eleven to fifteen grains too much to employ during the same period, and gives the drug in a large quantity (100 parts) of sugar water, a tablespoonful of the mixture being taken hourly. M. Petrescu claims to have exceeded without hurtful effect, and with marked benefit to the patients, all former recorded measures. His material was selected from various drug stores, in order to avoid the risk of error dependent on the special quantities of any given sample and his results are briefly stated as follows, viz. :

1. The duration of the whole attack is said to be shortened, four days to one week.

2. Fever is strongly controlled and progressively diminished.

Sphymographic tracings show that the pulse is rapidly and decidedly slowed, and dicrotism disappears in great measure and finally altogether, by absorption of the primarily separate dicrotic wave into the descending slope of the main pulse-wave. A regular action of pulse is maintained, as is also the arterial tension from first to last, in apparently due proportion to the heart action and stage of the disease. Respirations diminished steadily and gradually in frequency. M. Petrescu accordingly maintains that the doses he employs represent the true therapeutic quantities of this drug in pneumonia ; that only when so given can its antiphlogistic action be relied upon ; and, further, that digitalis alone has been able to reduce the mortality from pneumonia to a minimum.— *The Practitioner.*

SOME POINTS IN THE PRACTICE OF ARTIFICIAL RESPIRATION IN CASES OF STILLBIRTH AND OF APPARENT DEATH AFTER TRACHEOTOMY.

Mr. Francis Henry Champneys, in an article in the April number of *The American Journal of the Medical Sciences*, in which this whole subject is carefully considered, thus sums up to the treatment :

Never hurry, it is not a question of seconds, and success depends upon a fine exercise of the judgment. Make a good diagnosis, first as to life or death ; secondly, as to the stage of asphyxia (if life is not extinct). If the child is macerated, it is obviously dead and past hope. If the heart beats, ever so slowly and feebly, it is not dead. If the heart is not beating, death is not certain, unless it can be proved to be inactive for some time. If the child is livid and not flabby, it will be probably come round, wipe out its mouth and pharynx, and rub it with a soft cloth down the spine, press gently on the cardiac region. If this produces no effect, inflate the lungs by the mouth, and then by Silvester's method. If air enter the lungs, well and good ; if not, try Schultze's method, or insert a catheter. On the first sign of muscular action, plunge the child into cold water, or into alternate hot and cold baths. Vary the treatment between occasional inflation of the lungs, artificial respiration, pressure over the cardiac region, baths, irritation down the spine according to the judgment; remembering what may be expected of each method, and that no one will suffice for all cases. Watch for signs of resuscitation, namely, inprovement in the color, in movements, in cardiac pulsations, as described above. Never be content until the child breathes regularly, and appears to be continually improving.

DIABETES MELLITUS SUCCESSFULLY TREATED WITH BORACIC ACID.

F. A. Monckton reports, in the *Australian Medical Gazette* a case of diabetes mellitus cured by the use of this drug. He says, while pointing out the value of boracic acid as a diabetic remedy has only been proved in this one case, let me earnestly beg that those who have an opportunity of watching its effect will try it. When placed on the boracic acid the patient's urine had a specific gravity of 1.025. Seven grains of the acid were given three times a day, and at the end of ten weeks the specific gravity was 1.016 ; no sugar. He continues the drug, however, as it produces no unpleasant effects. No stringent dietary regulations were observed in this case.—*Medical World.*

A HINT ON THE TREATMENT OF RINGWORM.

Dr. R. W. Leftwich writes to the *Lancet*, February 6th, 1886: Last August a lady asked me to examine her nurse-maid's head. I did so, and found a well-marked patch of ringworm about an inch and a half in diameter. The mistress was naturally unwilling to expose the contagion to her children, who presented no sign of the disorder, and almost equally unwilling to part with the girl for a time. After some reflection I told her I thought the difficulty might be gotten over with only very slight risk to the children, and treated the case in the following way. Having cut the hair close to the scalp, all round the patch, I first painted it with an alcoholic solution of iodide of mercury—an old fashioned but excellent remedy, obtained by adding calomel to tincture of iodine and using the supernatant colorless fluid. As soon as the slight soreness it produced had passed off I applied an iodine plaster, obtained from a formula in Beasley's book and attributed to Roderburg, an ounce of the plaster containing a half a drachm of solid iodine. This spread on kid, was carefully applied to the patch, which it overlapped all round. At the end of a fortnight it was removed and the ringworm appeared practically cured. To make sure however, it was again painted with the above-mentioned solution and a fresh plaster applied for another fortnight. Upon being taking off, the whole surface of the patch was found covered with short hairs. No other patch has made its appearance upon the head or elsewhere, and not one of the three children with whom the patient was in daily and hourly contact, took the complaint. Possibly the plaster alone would have been sufficient, but I thought it safer to use the paint in addition, and I feared that if I used a more powerful plaster the irritation might tempt the patient to remove it. I might also have used a plaster containing oleate of mercury, but doubted whether it could be made sufficiently adhesive. The advantages of this mode of treatment are obvious enough, for by its means the risk of the disease being spread by actual contact, by means of caps and by the common use of hair-brushes, is reduced to a minimum. I find no allusion to this method in the ordinary works on the subject, and therefore infer that, if new, it is not widely known.

TUBERCULAR MENINGITIS CURED BY IODOFORM.

A Swedish physician, Dr. Emil Nelson alleges that he has cured an undoubted case of tubercular meningitis by frictions on the shaved scalp with iodoform ointment (1 to 10). The patient was a boy, aged 8, whose mother had a family history of phthisis, and four of whose brothers and sisters had died from tubercular meningitis. The symptoms in this child's case were similar to theirs—headache, torpor, convulsions, strabismus, and pyrexia. He was at first treated with calomel and iodide of potassium, but did not improve; and, after having been under treatment a week, became distinctly worse, being unable to take food or medicine. The pallor of the face, which had pre-existed, gave way to flushes of the cheeks. The child threw himself out of bed, and presented severe clonic spasms of the limbs and of the facial muscles. The head was then shaved, and iodoform ointment rubbed in, an oil-skin cap being put on. The friction was repeated three or four times in the day, and the next day there was a decrease in the convulsive movements, the sleep was calmer, and spasmodic contractions, which had previously been excited by the slightest noise, now ceased to be so. Consciousness shortly afterward returned, and the child's face became of a more natural color. This, however, was accompanied by a severe coryza, redness of the lips, and irritable cough, the breath smelling strongly of iodoform. The ointment was discontinued, and syrup of iodide of iron given. The unpleasant symptoms rapidly disappeared, and the child was soon running about in good health.—*British Medical Journal.—Md. Med. Journal.*

THE PREVENTION OF MAMMARY ABSCESS.

Philip Miall, Consulting Surgeon to the Bradford Infirmary, says in the *British Medical Journal*: A method of treating inflamed breast after delivery may be worth notice in connection with Dr. Edis's paper on the use of support by a bandage or towel. Dr. Edis appears to use his method after every delivery, and, by beginning it before lactation is established, assures success; but one occasionally sees cases where abscess is on the point of forming, either from neglect or injudicious treatment, and where, consequently, something more is required.

I have repeatedly seen a hot, heavy inflamed breast, with redness of skin, throbbing, and deep-seated pain, the pulse being 120 in the minute, yet these symptoms have disappeared in the course of a few hours under fomentation with hot water and ammonia. An ounce of carbonate of ammonia is dissolved in a pint of boiling water, and, when solution is affected, the temperature will scarcely be too high for fomentation with cloths dipped in the liquid. These must be assiduously applied for half an hour at least, and repeated two or three hours later if necessary. It is well to protect the nipples, though I have never known them to be injured. Relief is immediate, and more than three applications are seldom required.

Unless applied too late, or improperly, or some foolish rubbing or drawing with the breast-pump be used, contrary to orders, this remedy may be thoroughly relied on. I am indebted for it to Mr. Douglas of Banbury; and as it has had a trial of thirty years in my hands, I can speak of it with some confidence.

DOVER'S POWDER AND ITS MODIFICATIONS.

In the *Asclepiad*, 1885, Dr. Richardson speaks of Dover's powder: "In many cases there is no anodyne equal to Dover's powder, no other such a soporific febrifuge. If I could envy any one as a therapeutist, it would be the old physician who originally had the happy thought of blending astringent opium with relaxant ipecacuanha, and both with a diuretic and laxative. I suspect that Dover's name, though so little is known of the man himself, is more frequently quoted than that of any other physician. It is very often a good plan to modify Dover's powder by employing other salines than sulphate of potassa. The true Dover's powder contains nitrate of potassa as well as sulphate, four grains of each; and it often seems to me reasonable to revert to this form, as the nitrate of potassa in small doses is so good a diuretic. I also often venture to use other modifications with advantage. In acute rheumatic fever I usually substitute sodium salicylate for the potash salts; in gout, bicarbonate of soda; in remittent febrile cases, two grains of quinine with five of sodium salicylate; in tonsillitis and other febrile throat-affections, chlorate of potassa. It would surely be worth the time and skill of one of our scientific pharmaceutical brethren to prepare and bring out a series of Dover's powders in these modified forms."

PRURITUS OF WOMEN.—LOCAL TREATMENT.

All acquainted with the incessant suffering which some women undergo from pruritus at the period of the menopause must be very desirous of being made acquainted with a prompt remedy for so distressing an affection. Whether it arise from the presence of prurigo, urticaria, eczema, herpes; or whether it exists without any eruption at all, it is alike difficult to allay, as the great number of remedies which have been proposed testifies. Of these veratria is by far the most efficacious. When the pruritus is localised at groins, arm-pits, walls of the abdomen, or behind the ears, gentle friction night and morning with an ointment, consisting of thirty parts of lard and a quarter of a part of veratria, usually gives relief. When the pruritus is generalised, the internal administration of the veratria is preferable. Two centigrammes should be made into ten pills with liquorice powder, of which from two to six should be taken daily, either half an hour before, or three hours after meals. Only one should be taken at a time, an additional one being given each successive day until the maximum of six (three milligrammes) is attained.—*Dr. Chêvno in Le Progres Medical.—Med Times.*

HYPODERMIC INJECTIONS OF COLD WATER IN SCIATICA.

Dr. D. H. Lewis, of Lone Pine, Pa., writes to the *New York Med. Record* for January 23, 1886, that he was consulted by a man 60 years of age, who was suffering greatly from sciatica. He had been treated for the past eight weeks by two physicians, and had run through the entire list of anti-neuralgic remedies. Being desirous of trying something which was at least new to the patient, Dr. Lewis determined to employ hypodermic medication, and having no drug handy which he cared to use, he filled the syringe with cold water and injected the fluid deep down behind the trochanter. The following day the patient returned and said he was feeling much better. The injections were accordingly repeated every third or fourth day for a period of three weeks, by the end of which time a complete cure was obtained. The writer has since treated a number of cases of sciatica in the same way, with equally gratifying results. He thinks that possibly many of those cases which have been reported as cured by the injection of certain drugs, such as cocaine, might have terminated in an equally favorable manner had simply cold water been used.

HOT WATER IN ACUTE PROSTATITIS.

In *Lyon Medical* we find a recommendation of the use of hot water in cases of acute-prostatitis. Two cases in point are cited, in which the violent inflammatory phenomena were subdued within a few days.

In the first instance sudden dysuria became established in the course of a gonorrhea. An enormous tumefaction of the prostate was found on palpation per rectum. A large swelling with smooth surfaces, of considerable hardness and pulsating under the examining finger was made out. The suffering was intense. At once compresses wrung out of hot water were applied to the perineum and hot enemata were given and order retained. The pain, the vesical and rectal tenesmus and dysuria became lessened at once. The swelling subsided and recovery was perfected at the end of the third day.

In the second case the same success followed rectal injections of hot water that were made at night and in the morning, together with hot water compresses applied to the perineum throughout the day.

VENESECTION.

The critical time for relief of an actively congested or inflamed brain, or lung, is sometimes allowed to pass for want of a ready and certain method of opening a vein. A blunt-pointed and dull pocket-knife may be used in such an emergency. Having first put on the usual constricting bandage, to distend the veins, transfix the most prominent vein with a needle. Thus held securely, it is easy, even with a dull knife, to cut a valvular incision into the vein so that the blood will flow freely. (Levis.) A piece of broken glass would suggest itself in some cases.

MODIFICATION OF DOVER'S POWDER.

Dr. B. W. Richardson, in the *Asclepiad*, suggests some useful modifications in the preparation of Dover's powder, for use in certain diseases. He recommends the substitution of sodium salicylate for the potash salt, in rheumatic fever; soda bicarbonate, in gout; quinine and its salicylate in infantile remittents; and potass. chlorate in tonsillitis and febrile throat affections. True Dover's powder contains both nitrate and sulphate of potash.—*Medical World.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL MAY, 1886.

MONTREAL GENERAL HOSPITAL.

Dr. Godfrey having resigned from the Indoor Surgical Staff, and Dr. Simpson from the Staff of Assistant Surgeons, both were elected to the Consulting Staff, the former on the 12th of May, the latter on the 18th of May. Dr. Godfrey's vacancy it was well understood would be filled by Dr. Bell, (from the staff of Assistant Surgeon) being elected thereto. Two vacancies were thus created on the out-door staff for which McGill College put forward as candidates, Dr. R. J. B. Howard and Dr. Wm. Sutherland, and Bishop's College Dr. A. Lapthorn Smith. The two former gentlemen were elected by large majorities, but Dr. Smith polled a most respectable vote, which we have no doubt will show a considerable increase when another vacancy occurs. The election, which took place in Nordheimer's Hall on the 20th ult., was a sorry exhibition of mismanagement, no attempt, so far as we could see, being made to prevent irregular voting. If a year ago it was thought necessary to mark off the name of each governor as he voted, surely this year, in a public hall, when other than governors could and were present, some more careful method than simply passing around a hat to receive ballots should have been resorted to. After the collection had been made, and the scrutineers were busy at work, ballots by the half dozen were passed up in a most singular manner on to the platform, and conveyed in to the scrutineers.

We do not for an instant insinuate that any one voted who had not the right to do so, but there was nothing to prevent its being done. It was not till the chairman's attention was called to the fact that the ballot had not been declared closed that he took the steps necessary to do so. Now this is all wrong; either the ballot should be closed the moment the collection of votes is made, or it should be understood before hand that the ballot would remain open up to a certain hour. Once before, and that not many years ago, a candidate had good right to complain of injustice from a somewhat similar incident. Then, when the collection had been made, and the votes counted, a tie was the result, and it was subsequent votes taken in that in all probability changed the result of the election. The voting at every election should be conducted in a similar manner, and not in the fashion that may at the moment strike those responsible for it. Then the voting papers were a sorry exhibition of either carelessness or want of knowledge, for the various tickets were many of them wrong. Some contained names which should not have been on them, while others that should have been on, were absent. The chairman made an explanation, so as to have the errors corrected, but very serious and unfortunate results might have occurred. The question asked by Dr. Campbell at the meeting was a very pertinent one, and we are sorry that it was left to the chairman to make reply. Dr. Campbell inquired if the gentlemen (medical) who less than a year ago had so bitterly and unpleasantly opposed the claim of the assistant surgeons and physicians to election to the position of consultants after twelve years' service, had really been permanently converted, or whether, in promising Dr. Simpson not to oppose his election to the Consulting Staff (Dr. S. being an assistant surgeon, and only having served the twelve years), they had simply done so so as to serve a second vacancy. In other words, was this action of theirs a political move for the time. There were those present who could have answered this question much more satisfactorily than did the chairman, who said all he knew was that Dr. Simpson had resigned and that his promotion to the consulting staff

had not been opposed, but these gentlemen kept silence. We also think it our duty to protest against any candidate or candidates issuing a ticket somewhat like what is officially issued by the committee of management on the day of election, unless it contains the names of *all* the candidates. Such political trickery is unworthy of those who twice lately have been guilty of it. Other questionable means were made use of at this election, which we have heard many of the governors condemn.

PROPOSED CHANGES IN THE QUEBEC COLLEGE OF PHYSICIANS AND SURGEONS.

We would draw the particular attention of the profession in the Province of Quebec to the report which was presented to the Board of Governors of the College of Physicians and Surgeons of Quebec at their last semi-annual meeting, held in Montreal on the 12th of May. This report will be found in full in this number of the RECORD, and it will be brought forward for discussion at the approaching tri-annual meeting of the College. There can be no question that the profession throughout the Province are not in full and active sympathy with the College. They feel that it has been controlled by a few, who, gathering together a large number of proxies, make their own list of Governors for each district and elect them. In this way they claim the Board has consisted, not so much of representatives for each district, as of representatives from each district bound to follow and endorse the action of men to whom they owe their position. We believe the profession are right, and the sooner they take the election in their own hands the better. The method of election suggested is simple and easily carried out. It is a question, however, to which we draw attention, whether it is wise to continue the districts, as named in the report, which are the districts as now recognized, or whether we should embrace all the judicial districts in the Province. Whatever may be suggested in this way, there must be no attempt to increase the number of members on the Board, which are already quite numerous enough. Indeed, if any change can be made, it should be in the direction of reducing the number of Governors. The question of a Central Board of Examiners—as in Ontario—would have been endorsed at least seven years ago, had not Laval University positively refused to come into line. She has since recognized the error she then made, and is now strongly in its favor. All the schools being now supporters of the scheme, we hope to see it soon an accomplished fact. The fact of the two languages spoken in this Province, and which of course had to be taken into consideration by the committee, was, we understand, a source of some difficulty in arranging details. A French and an English Board was out of the question, for each might, and very possibly would, claim superiority of their examinations. The suggestion of the committee to have double examiners, one in English and one French, and both responsible for the examination, although somewhat expensive, seems to us to be the only way of meeting the difficulty. The whole question will be brought forward at the tri-annual meeting of the College, which takes place in Montreal on the 14th of July next. In the meantime we ask our readers residing in the Province of Quebec to read the report carefully, and to come to the meeting prepared to discuss the various points raised by it.

At the meeting of the International Medical Congress, in Copenhagen, an estimate of the number of physicians in the entire world was made. The number was 189,650.

In the Lying-in-Hospital of Vienna, 9,000 women are confined annually. The rate of mortality is one-half per cent. for the mothers and 15 per cent. for children.

Prof. Turner, of Edinburgh University Medical Faculty, has been Knighted by the Queen.

ALEXANDER'S OPERATION.

During the past twenty years immense advances have been made in the treatment of diseases peculiar to women. Operations have been performed new to surgery, resulting in increased longevity and at the same time bringing comfort and happiness to many a woman who otherwise would drag out a miserable and shortened existence. The renown which certain of the specialists in this department have deservedly obtained and the prominence which their results have given to the subject has induced a desire in many to distinguish themselves by having their names attached to some new and otherwise original operation. The mind is burdened by being obliged to remember the names attached to operations, and though it is but right that the surgeon who first performs any operation should receive just recognition still it may be fair-

ly questioned whether it would not be better to know such operations under that name which would best convey its meaning to those interested. In proof of this many of our readers will no doubt ask themselves what Alexander's operation consists of. Upon reflection they may be able to recall having read in late journals what it means, and probably criticized the utility of its performance. Like the "Sigaultian" operation it will in all likelihood not long survive its birth, for it is a procedure which does not commend itself to the anatomist, and the *questionable* success which has been claimed for it is more than counterbalanced by the danger attending its performance. A western journal lately records one of these successful cases which the writer hastens to publish. The latter however in concluding his article naively adds that his patient is still wearing a pessary. The following timely remarks of M. Pagot, made at a late meeting of the Gynecological Society of Paris during a discussion upon the operation for shortening the round ligament will therefore meet with the approval of the majority conversant with the conditions sought to be relieved.

"When an operation is performed, of which death is a possible result, I am the first to approve of it, provided it has for its object the saving of a life absolutely in danger. I can understand how a surgeon may attempt the radical cure of a hernia, since hernia may, at any given moment, become a cause of death. But to-day such operations are resorted to under the pretext of correcting a displacement of the womb. Yet it would probably be impossible to cite a case where a woman died because she had a uterine displacement. It is true that in a pregnant woman retroversion may, if not remedied, produce death. But it is proposed, when the womb is empty, to expose the patient to this grave operation. While I accept extreme measures, undertaken to save a woman who has a uterine tumor, or an ovarian cyst, which may destroy life in a short time, I indignantly protest against dangerous operations undertaken for the relief of conditions which in themselves do not imperil life. Uterine displacements of themselves are insignificant, and produce no symptoms unless associated with uterine catarrh or other lesions of the womb. I believe that if the surgeon would fully and honestly explain to women the dangers of this operation, not one would be found willing to expose herself to so serious risks."

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The semi-annual meeting of the Governors of the College took place in Montreal on the 12th of May. The attendance was good. Dr. Lemieux, the President, occupied the chair. A resolution of condolence on the death of Dr. Marsden, one of the oldest Governors of the College, was moved by the Hon. Dr. Robitaille (ex-Lieut-Governor of the Province of Quebec) and seconded by Dr. R. P. Howard. It was carried unanimously, and the Secretary was ordered to send a copy of the resolution to Mrs. Marsden. The reports of the assessors of the various medical schools were read and adopted. The report from the Board of Preliminary Examiners of the examination held on the 6th and 7th of May was not ready for presentation, and the Secretary for Montreal announced that this was due to three causes—1st. The death of one of the examiners, the late Prof. Miller of Quebec, thus throwing additional work on the rest; 2nd. The unusually large number of candidates; and 3rd. The fact that some difficulty had been caused by one of the candidates getting possession of some of the examination papers. On motion a committee was named to consult with the Preliminary Examiners on the subject, and to report at a special meeting of the Governors, which thePresident was authorized to call, to be held in Montreal on Tuesday, the 13th July, the day preceding the tri-annual meeting of the College; the report of the Preliminary Board to be presented at this meeting. A number of graduates presented diplomas from universities of this Province and received their licenses. Two gentlemen, Dr. Yeats, of Dunham, and Dr. Canfield, of Coaticooke, qualified on British qualifications. The most important business presented was the report of the committee appointed at the last meeting to consider the question of changing the method of electing the Governors of the College, as well as to consider the advisability of establishing a Central Board for the examination of all candidates, as in Ontario; also to suggest such amendments to the Medical Act as they might think desirable. The following is the report of the committee:—

The Committee appointed at the last semi-annual meeting of the College to consider the amendments necessary to put into force the report of the Committee on the Financial condition of the College, also to consider the suggestions made at the last Tri-annual meeting, with regard to the manner of electing the Governors, as well as the

notice of motion given by Dr. L. LaRue, regarding the establishment of a Central Board of Examiners, met in the City of Montreal on the 16th of February 1886. There was present Drs. Lemieux (president) Simard, Guay, L. LaRue, Lachapelle, Austin, Hingston and Campbell.

Several hours were spent in discussion when the Committee declared it was in favor of the College, having a Central Board of Examiners.

It also came to the conclusion to suggest that the following subjects be made part of the Preliminary examination, and that they be made obligatory—Moral and Intellectual Philosophy—Physics, Mineralogy, Geology, Astronomy and Botany.

Time for adjourning having arrived. It was moved by Dr. Simard—seconded by Dr. Austin, That a Sub-committee, composed of Drs. Geo. Ross, Hingston, Lachapelle, Leprohon and F. W. Campbell be named to complete the work of this Committee, concerning the alterations to be made in the Medical Act, all in conformity with the resolution passed at the last Semi-annual meeting of the Board. Carried.

The Committee adjourned *sine die*.

The Sub-Committee appointed by the general Committee, met on February 27th, March 1, 7, 10 and 15, also on the 7th of May.

They beg leave to submit the following as the result of their deliberations :—

CENTRAL BOARD OF EXAMINERS.

1. The Board shall be known as the Central Board of Examiners, and shall consist of two examiners on each subject, one English and the other French. Both shall assist at the examinations, but the immediate conduct of the same, shall be by the examiner speaking the language to which the candidate belongs.

2. The Central Board of Examiners shall consist of a representative from each medical school now recognised by the Medical Act, and of an equal number not connected with any medical school.

3. The Central Board of Examiners to be appointed annually by the Provincial Medical Board, the names being submitted by a nominating committee, which nominating committee shall be named by the President, subject always to the revision of the Medical Board. It shall consist of one representative from each Medical School and an equal number selected from the members of the Board not connected with any Medical School. In case of a vacancy occurring on the Central Board of Examiners, either by death, resignation or removal, the said vacancy shall be filled by the President of the College.

The members of the Central Board of Examiners may or may not be chosen from among the members of the Provincial Medical Board.

The Central Board of Examiners shall commence their examinations on the second Tuesday in April, and they shall be held at Montreal or Quebec, as may be decided by By-law of the Board.

The fee to be paid to the members of the Central Board of Examiners, shall be $10 per day, and mileage at the rate of five cents per mile.

The professional examination shall be divided into Primary and Final. The examinations shall tbe written and oral:

FEES.

Fee for Primary Examination	$10.00
" Final "	10,00
" Diploma of Membership.....	25.00

PRELIMINARY EXAMINATION.

The Preliminary examination shall be held in the first Wednesday in July, at Quebec or Montreal, as may be decided by a By-law (the suggestion of the General Committee of additions to the Preliminary examinations is not considered wise. The sub-committee are of opinion that no change should be made in the Preliminary examination.)

Graduates in Arts of any University in Her Majesty's Dominions, to be exempt from passing the Preliminary examination.

OBJECTION.

Dr. Hingston objected to the above clause on the ground, that it was incomplete, and moved the following addition.

"That any student who shall have attended a complete course of classical studies, and shall furnish proof of having passed an examination equivalent to an examination in Arts shall also be exempt from the Preliminary examination.

DATE OF PRELIMINARY EXAMINATION.

The Preliminary examination for admission to the study of Medicine shall be held on the first Wednesday in July.

BOARD OF GOVERNORS.

The Board of Governors shall meet annually on the second Wednesday in July, the place of meeting to be definitely settled by a by-law of the Board. The sub-committee think it advisable that a permanent locality for this meeting be selected.

METHOD OF ELECTION OF GOVERNORS.

That each District shall after these amendments become law, elect their own representatives.

The Registrar shall two months previous to the date of election, furnish the Secretary at Quebec, a list of all those qualified to vote in the City and District of Quebec, and District of Three Rivers; and to the Secretary in Montreal a list of those qualified to vote in the City and District of Montreal, and the District of St. Francis. If there be only one Secretary, then to the person holding that office. One month previous to the election he shall send out printed ballot papers, which shall be signed by the voter, sealed and returned within two weeks, to the Secretary whose signatures is on the Ballot paper who upon receipt of the same, shall place them unopened in a Ballot Box, which shall be placed locked, in the hands of the Secretary, and which shall only be opened in the presence of Scrutineers named who shall count the Ballots, and declare who has received the majority of votes.

A printed list giving the result of the Ballot, shall immediately be posted to each voter.

The election of Governors shall take place on the first Wednesday in June.

The Scrutineers shall be named by the Presiding officer, at the meeting of the Board, held preceding the tri-annual election.

The majority of the sub-committee are of the opinion, that the amendments regarding the Central Board of Examiners, shall only apply to those who enter upon the study of Medicine, after the 1st of May 1886. A minority are of opinion that they should come into operation at once.

The sub-committee also discussed and agreed upon certain amendments to the Medical Act, which amendments have in view the facilitation of legal process in the courts.

Copies of this report were ordered to be printed and sent to every member of the College, and its consideration was relegated to the tri-annual meeting of the College, which takes place in Montreal on the 14th of July next.

PERSONAL.

Dr. Chandler, C.M., M.D., and Gold Medalist Bishop's College, 1880, is in practice in Boston, devoting his attention entirely to diseases of the eye. He has been elected one of the surgeons to the Boston Eye and Ear Infirmary, which is said to give the best opthalmic and aural clinics outside of Moorfields, London. Dr. Chandler is rapidly rising in the special branch to which he is directing his energy, and promises before long to rank as one of Boston's most reliable specialists.

Dr. Bishops, C.M., M.D., and Gold Medalist Bishop's College, 1882, is also practicing in Boston. His office is in the Hoffman House. He is doing well. He has for some time held the position of Surgeon to the American Mutual Accident Association for Boston and vicinity. This occupies much of his time, and is considered a very valuable position.

Dr. Wolfred Nelson (M.D., Bishop's College, 1872) has for some time been Medical Inspector for South America for the New York Life Insurance Company. He was in New York early this month for a few days. His many friends will be glad to know that his health is remarkably good.

Dr. Godfrey has resigned his position of Surgeon to the Montreal General Hospital, and been elected on the Consulting Staff. Dr. Bell has been elected to fill the vacancy.

Dr. Simpson, Assistant Surgeon to the Montreal General Hospital, has, after twelve years' service, been promoted to the Consulting Staff.

Drs. Sutherland and R. J. B. Howard have been elected Assistant Surgeons to the Montreal General Hospital.

Drs. Armstrong, Wood and McConnell, professors in the Medical Faculty of Bishop's College, sailed for Europe in the Alaska from New York on the 19th of May.

Dr. Elder (M.D., McGill College, 1885) has commenced practice in Huntingdon, P.Q.

Dr. A. A. Browne has resigned the professorship of obstetrics in McGill University.

We are sure that the many friends of Dr. J. C. Cameron, who last year heard with regret of the serious symptoms which compelled him to resign the chair of Obstetrics and Diseases of Chidlren in

Bishop's College, as well as all the active work in connection with this Journal, will learn with sincere pleasure that he has so far recovered as to ustify his accepting the Professorship of Obstetrics in McGill College, rendered vacant by the resignation of Dr. Arthur A. Browne.

LOCAL AND GENERAL.

Montreal appears to be rapidly assuming the airs and graces of a "specialist" centre, and as spring poetry is now in order I quote, without apology, a portion of a clever satire from the organ of the New York Post Graduate Medical School—*The Quarterly Bulletin*, which must be read by that secondary consideration, the general practitioner to be appreciated.

"'Mid sulphurous fumes, in antiseptics rich
Enough to please our Peters, cure the itch,
Great Satan sat, dark frowns upon his face,
As when one finds another's got his case.
Fiercely he mutters: 'Twenty doctors more
Within two days have come within my door,
And now at last, the news quite strikes me dumb,
The porter says some Specialists have come.
Should old ambitions once these fellows seize,
If they put out their signs, take in their fees,
Sure all my toils of little use would be,
Then I must go, this is no place for me.'
The Demon rose, and shook from off his coat.
The yellow films of *U.S. Sulphur lot.*,
Uttered a cough which all Hell's regions racked,
And ordered out his baggage to be packed.
'I'll up to earth,' he said, 'for I must know
Why doctors are now rattled on me so.'
Out into space he shot, a curious sight,
The Devil bent on setting things aright."

Knowing it would be of little use to try to keep the Old World Doctors out of the inferno Satan visits first Boston, then Philadelphia, and finally New York, about which last place he says:

"For sure unless all stories lie
The doctors there are all much worse than I."

On his way thither he is blown up by an explosion, which inflicts a great variety of injuries:

"A much bruised party rose from up the ground,
He'd every ill that's in the body found—
A spine concussed, a fractured bone or two,
A dozen sprains, his skin quite black and blue,
Disordered function of each inner part,
Uneasy stomach, damaged lungs and heart;
But sweet philosophy some comforts bore,
"I don't mind" he said, "I've fallen before,"
And sure the fates do in my cause enlist
To fit me for each New York specialist."

Then he visits them all, the surgeons, the orthopœdists, the oculists

"Who ply the art that's based on cocaine,"
The disciples of Neuropathy.
"So great her science so small her art"

And, to conclude, the "womb doctors" receive the following attention:

Besides he found they'd stolen his own wares,
And caught their victims all in painful snares;
Some pleasures still in Satan's lot prevail,
For he at least unquestionably is male,
For him no gynecologist could seek
Within persuasive specula to peek, or, with some learned name his troubles labelled,
Like Parliamentary motions, have him tabled.
I'm sure that once the Devil stopped and prayed,
'Twas when he found he could not be spayed.
O, gentle Art, I'm sure I am not blind
To all the good you've done for womankind,
But once 'twas woman's part to cut and sew
While now to cut and sew her parts you go.
Too oft perhaps might it not be a gain
If you made less of womb and more of brain?"

The New York *Medical Record* "buds and blooms and blushes" in the following truly vernal style.

"Little drops of water,
Little grains of milk,
Make the little doctors
Of the homœopathic ilk

Precious little bottles,
Sitting in a row,
Filled with potent liquid
Known as H_2O."

A drop of Mother Tincture,
Humble though it be,
Makes the tenth dilution
When poured into the sea.

Of all the gulls delusive
The greatest is to know
Where lies the healing power.
In a drop of H_2O."

This also:

The Landlords who bloom in the Spring—
The doctor who hunts in the Spring, tra la,
For a bright pleasant office up town,
Finds it rather a difficult thing, tra la
To get a landlord on a string, tra la,
And makes his rent figure come down,
And that's what I mean when I say or I sing
To the devil with landlords who bloom in the Spring
Tra la, tra la, tra la, tra la,
To the devil with landlords in Spring.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, JUNE, 1886. No. 9.

CONTENTS.

ORIGINAL COMMUNICATIONS.
Clinical Lecture..... 529

SOCIETY PROCEEDINGS.
Medico-Chirurgical Society of Montreal.....53:, 535

PROGRESS OF SCIENCE.
The Treatment of Acute Infantile Bronchitis..... 535
Irrigation in Bowel Diseases in Children..... 538
The Dietary in Indigestion..... 539
Food in the Treatment of Neurasthenia..... 541
A Few Practical Observations on Vaccination, the Preservation of Lymph and other Points..... 543
The Prophylaxis of Asthma..... 544
Therapeutic..... 545
Management of Breech Presentations 546
Inhalations in Phthisis..... 547
Obstetric..... 547
The Management of Placenta Prævia. 548
Treatment of Painful Fissure of the Anus without Operation..... 548
The Treatment of Epilepsy with Borax..... 549
The Cure of Asthma..... 549
Diarrhœa and Feeding Bottles..... 549
Reduction of Premature Labor..... 550
The Treatment of Epilepsy..... 550
Nux Vomica in Prolapsus Ani..... 550
A Liniment for Earache..... 550
A Painless Method of Introducing the Catheter..... 550
Treatment of Scabies..... 550

EDITORIAL.
College of Physicians and Surgeons, Province of Quebec..... 551
Toronto Medical Society..... 552
Canadian Medical Association..... 552
The Ontario Medical Association..... 552

Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital February 23rd, 1886.

BY FRANCIS W. CAMPBELL, A.M., M.D., L.R.C.P.L.
Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

LEAD COLIC.

The two patients which I now present to you, have been twice before you in the Out-door Department of the hospital, but, owing to the number of patients who are continually seeking relief, I was able to make but a few very casual observations upon the disease under which they are suffering; and also because I desired to keep them and bring them before you to-day, when I would have an opportunity of going more fully into their history, which, as taken by my clinical clerk, Mr. Punchard, is as follows:

I. Leoupt has been a painter now for eleven years, has had the present symptoms for the last three years. His work is chiefly indoor; has used all kinds of paints and white lead frequently. He is not given to drink steadily, but occasionally goes on a spree. He first found his appetite failing, and general debility, eyesight poor, and unable to hold his brush for any length of time. General twitching of the facial muscles, a blue line surrounding each tooth—more marked in upper than lower jaw. His bowels are more or less constipated, complains of thirst. Skin of a pale sickly hue, pain in the stomach and also in the limbs of a neuralgic character.

Ulric Beauchamp has been a painter for fifteen years, has been troubled with present symptoms for a month and a half, has also used all kinds of paints, and constantly white lead. His appetite is poor, has been used to drinking beer at his meals, has always been careful to wash his hands before eating. He is now principally troubled with weakness of his hands, pain in his limbs and constipation, also complains of thirst, skin of a pale hue, and a marked blue line around the gums, his principal trouble is in his hands.

The disease is known under a variety of names 1. Saturnino. 2. Painter's Colic. 3. Plumbers' Colic. 4. Colica Pictonum. 5. Rachialgia. 6. Dry belly ache. It is met with in men who are employed working in lead. It is generally developed gradually. As a rule there are prodromic symptoms, such as pallor, often a yellow condition of the skin, peculiar sweet fœtor from breath and a sweetish taste in the mouth, loss of appetite, constipation, wandering pains in limbs, partial, emaciation and muscular debility. Then there comes a slight pain in the abdomen, which gradually increases in intensity. This pain may be in the epigastrium or hypogastrum, but most often it is close to the umbillicus. Rarely it extends over the whole abdomen, and at times shoots into the back. Its character is sometimes dull and aching, at others it is sharp, acute, lancinating. In severe cases the pain is extreme, causing the patient to groan and cry out. The abdomen is generally retracted, sometimes so much so that the bodies of the vertebræ can be seen through the abdominal parietes. The retraction is regular as a rule, giving the abdomen a boat-shaped look. At rare times the retraction is irregular, and the abdomen may be the reverse, *i.e.*, swollen. Pres-

sure on the abdomen generally relieves the pain, patients know this, and often lie on their belly, with a folded pillow or some such substance beneath them. Constipation is usually pronounced, and when a motion occurs the dejections are hard lumps or scybala. Nausea, hiccough and eructations of gas are common. Urine is scanty, and it is passed with great difficulty. The pain may be paroxysmal, the patient in the interval being free from it. Usually, however, it is always present, but the exacerbations are well marked, at times there is tenesmus. Pulse is abnormally slow, sometimes about 35 per minute, and is often irregular, in frequency, not intermittent. It is fuller and harder, as a rule, than it is in health. There is not any rise in temperature in the majority of cases; in a few an insignificant rise takes place. There are various disorders of sensation, hyperæsthesia, numbness, formnication, a feeling of pins and needles, neuralgic pains in both the upper and lower extremities, headache, amaurosis, this often is double, and comes on sometimes suddenly, sometimes gradually.

There are various motor disturbances, tremors, epileptiform convulsions, local paralysis of the extensors of the forearm, generally the right, sometimes both. This gives to the hand a very peculiar appearance, the wrist drop, as it is called. Rarely the muscles of the upper and lower extremities are affected and rapidly become atrophied. If the gums be examined nearly always a blue line will be found at the junction of them with the teeth. This line, gentlemen, is well illustrated in the two patients now before us, as is also another sign—a brown or black incrustation on the teeth with a tendency to rapid decay. This blue line is said to be due to the formation of the sulphuret of lead, sulphuretted Hydrogen being evolved from the decomposing particles of food, remaining between the teeth, and beneath the margin of the gums. The disease, if left to itself, may end in a few days or weeks. If the patient remains exposed to the source from which the lead comes it may continue an indefinite time. In itself it is not a fatal disease, but if the amount of lead in the system be large there at times develops an affection of the brain which is known as Encephalopathia Saturnina. This complication is generally met with among laborers whose work favors a copious absorption of the poison. It is marked by intense headache, amaurosis, delirium, sometimes maniacal, sometimes melancholia, epileptic convulsions,—these being often so frequent as to be the cause of death.

The introduction of lead into the system may be through the lungs, stomach, mucus membrane and the skin. Certain occupations involve the inhalation of lead. Those employed in the manufacture of lead, paints, and painters are the most exposed. Paper stainers, color grinders, card glazers and plumbers are also exposed. The disease has been known to result from sleeping in a newly-painted room. Water distributed in lead pipes is often the vehicle through which it is introduced into the system. One of the worst cases I ever met with was in the person of a fellow student, who for some time every morning drank soda water drawn from a fountain whose pipes were of lead. He was very ill, narrowly escaped death, but eventually made a good recovery. Lead is sometimes a component of the colors used in decorating confectionery, though I think now most confectioners use vegetable coloring. Articles enclosed in lead foil may also be contaminated.

Diagnosis.—The diagnosis of this disease is not at all difficult. The presence of a few of the prominent symptoms in a person exposed to lead will at once excite suspicion.

Treatment.—Is palliative and curative. Relieve pain by morphia, by mouth, bowel or hypodermically—warm fomentations to the bowels followed by hot linseed poultices over abdomen on which tincture of opium has been sprinkled. A mixture of chloroform and laudanum applied night and morning to the bowels is said to be very effectual in giving relief. Have the bowels move freely, and as they are constipated active cathartics are necessary; the most active advised is croton oil in a dose of 2 drops; compound powder of jalup is useful; so also is sulphate of magnesia in doses of 3 j. every 2 hours in ½ pint of water till free dejections are obtained. Purgatives are useful in removing from the system the lead contained in the contents of the bowels. A drachm of dilute sulphuric acid in a quart of sweetened water should be taken in the 24 hours. It is advised that this kind of lemonade might be used at meals by lead workers, as at this period much lead is thought to be introduced into the system. It would form an insoluble compound with any lead entering the stomach. Its efforts for good are said to have been tried and not found wanting at the large lead works at Birmingham, England. The great remedy for getting the metal out of the system, which is the object to be aimed at, is the administration of iodide of potassium, a soluable iodide of lead being formed, which passes away

in the urine and other excretions. Its use is not empirical, for cases of lead poisoning under treatment by iodide of potash have shown lead in the urine, when it was not present, previous to the administration of the remedy. Clinical observation has also given good proof of its efficacy, as I hope it will in the cases now before you. It is best to begin with a minimum dose of 5 grs. 3 times a day. It should be gradually pushed till 20 grs. three times a day is taken, if the system will stand it,—as it very often will. The sulphurated or sulphur bath is useful. It is made by putting ʒ iv. of the sulphuret of potassium to 30 gallons of water in a wooden tub. The lead appears on the skin as dark discolorations, which can be removed by a brush—change of occupation may be necessary; for the paralysis of the extensors, electricity in its different forms, such as local faradization and galvanization. Strychnia is very useful in this form of paralysis. The powerful effect which strychnia has upon the excitability of the nervous system, and the admirable results which have followed its use in other forms of paralysis, forces itself on our attention here. It may be employed hypodermically. It is a drug, however, which must be given with great caution, and its effects watched, for its efforts are various on different persons.

Meetings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 19, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Excision of the Elbow for Dislocation and Fracture.—Dr. Roddick exhibited a man on whom he had recently performed excision of the right elbow—one of six cases of excision of this joint operated on during the winter session. He wished to show this case just now as the man was about to leave the city. The operation had been performed for dislocation backwards, with fracture of the olecranon, and both radius and ulna, of three months' standing. The ordinary straight incision had been employed, and union by first intention had followed. The result was most satisfactory, the man having all the original movements of the joint. The arm was rapidly developing, so that already he could wield his hammer, being a tradesman.

Diseased Testicles.—Dr. Roddick also exhibited two specimens of diseased testicle—one of sarcoma, sent by Dr. Bryson of Port Arthur (no history); the other of tubercular disease, which he had that day removed from a young man aged 25. The latter noticed an enlargement of the left testicle about a year ago, which suppurated and burst, and a sinus still remains. The right one began to swell some three months ago, and at the time of admission to hospital was very much enlarged and the seat of extensive suppuration. It was removed, and found to be very much diseased, the entire epididymis being occupied by a large abscess. No history of gonorrhœa or traumatism, but a distant family history of tubercle.

Interstitial and Submucous Myoma.—Dr. Wm. Gardner exhibited the specimen and related the case. The tumor was of the size of a fœtal head. The patient, unmarried, never pregnant, aged 33, had been several years under observation, suffering from severe pain and excessive tenderness of the left iliac region and from profuse menstruation, lasting from eight to fourteen days. On one occasion, three years previous to operation, menses ceased for several months, and epistaxis became frequent and profuse. For years the patient had begged for operation. This was undertaken a week ago, the intention being to remove the appendages. The left ovary and tube were easily found, and ligatured, but the right appendages could not be found until the incision was extended and the tumor forced out. They were then found on the floor of the pelvis, and so sessile that they could not be ligatured. Under the circumstances, and in view of the fact that removal of the appendages does not always remove the symptoms of myoma, especially pain, it was decided to extirpate both womb and ovaries. Accordingly, a Tait's wire clamp was applied around the cervix, below the ovaries, and screwed up. The tumor was then amputated, and the stump cauterized and swabbed with a solution of perchloride of iron in glycerine, and secured externally at the lower angle of the wound. The patient did well for the first two days, was then very ill for the next two days, with incessant vomiting, rapid pulse (144), moderately high temperature,—flatus, however, passing after first forty-eight hours; at the end of four days all the symptoms suddenly improved, when copious diarrhœa set in. From this time the

patient gave no further anxiety. The clamp was removed on the 13th day. Convalescence was interrupted by an attack of cellulitis, from which she recovered perfectly. The catheter was at no time necessary. The case furnishes an exemplification of the fact that when undertaking the removal of the appendages for myoma, the operator may find, when he gets into the abdominal cavity, that he cannot do this, but may have to proceed to hysterectomy. In this case the extra-peritoneal method most in favor with British operators, and so successful in the hands of Keith, was selected, although it must be admitted that the intra-peritoneal method, when perfected, is that which, in the future, will probably give the best results.

Dr. Alloway spoke of having assisted Dr. Gardner, and of the gratifying results obtained by the operation.

Alexander's Operation.—Dr. Alloway read a report of a case of extreme retroflexion, for the cure of which, after all other means had failed, he performed Alexander's operation of shortening the round ligaments.

Dr. KENNEDY remarked that the operation was still on its trial.

Dr. SMITH said that Dr. Alloway's diagrams were most instructive and accurate, and that he congratulated Dr. A. on being the first to perform this operation in Canada. It would, however, be interesting to see the effect of future pregnancies upon Dr. A.'s patient.

Dr. WM. GARDNER said he had been present both in consultation and assisting during Dr. Alloway's operation. He looked upon the case as one of the most typical he had recently met with for Alexander's operation. There was not the slightest evidence of pelvic inflammation nor ovarian disease, and still the patient was, and had been for some time, a confirmed invalid, although every other known method of treatment had been adopted for her relief. Dr. G. said, in regard to pessaries in these cases, that increased experience had led him to use them very much less often of late than he had formerly.

The PRESIDENT remarked that he had the pleasure of being present at Dr. Alloway's interesting operation, and that he fully appreciated the difficulty in performing it.

Dr. TRENHOLME also reported a case of Alexander's operation, and stated that though some time before the profession, it had not yet obtained an unquestioned place in gynæcological surgery. There is still doubt as to the particular class of cases in which it may reasonably be expected to be useful. Further study is needed as to the anatomy of the round ligament. This line of investigation could be helped forward by those who have charge of the dissecting rooms. If the ligament is frequently found to be imperfectly developed, we will then have to see in what class of cases this anomaly exists, for upon this fact will depend the selection of cases. He said it was with this end in view that he now gave the details of a case lately under his care. The history is as follows: The young lady is 26 years of age, slight build, but regularly and well developed, and from earliest appearance of menses has been a sufferer. There are severe pains preceding and following the menstrual flow. Her sufferings are so severe that she is obliged to lie in bed and take sedatives, or resort to hot water fomentations for their relief. The menstrual pains are gradually increasing in severity and duration, so that at present they last for six or seven days. During the flow, and for about a week before the premonitory symptoms of the flow, she enjoys comparative comfort. Upon examination, the uterus was found retroverted and the fundus well down into the hollow of the sacrum. The left ovary was displaced and occupied the pouch of Douglas; it was also tender and slightly enlarged, probably due to chronic inflammation. The right ovary and left Fallopian tube were normal, but there was inflammation of the right Fallopian tube. The uterus was easily replaced, but the prolapsed ovary on the left side and the diseased tube on the right rendered the retention of any form of support a difficult matter. There were no indications of thickening of the tissues from pelvic cellulitis. Under these circumstances he proposed Alexander's operation as a substitute for the more serious one of removal of the ovaries and tubes. The operation was undertaken, when he found the left round ligament so extremely attenuated that it afforded no hope of a successful result, and, consequently, the operation was abandoned. The vein accompanying the cord was very much congested, which he regarded as indicating venous congestion of the pelvic viscera. Dr. T. said that in this case he had no doubt but that the congenital defect of the round ligaments was responsible for the displacement and sufferings of his patient. He might add that withdrawing the cord to the extent of two inches gave no control of the uterus

Whether this was due to a superfluous extent of cord, or some internal adhesions, he did not know. He considered this an instructive case, and from it would gather that the cases most likely to be benefited by this operation are those of acquired dislocations in those who have ceased bearing children, and where we have reasonable ground to expect a normal development of the round ligaments. He submitted this case as a small contribution to the literature of this subject, in the hope that other observers may pursue the investigation and define, with approximate certainty, the class of cases in which it should be performed.

Dr. ALLOWAY said that the proper selection of cases was of the utmost importance. He had pointed out in his paper that there should be no evidence of pelvic inflammation, especially parametric tenderness, nor ovarian diseases, and that the uterus should be freely moveable in all directions. Upon these grounds he would draw attention to the unfitness of Dr. Trenholme's case for Alexander's operation; and observe that the reports of such cases tend to bring discredit alike upon a probably humane procedure and upon the surgeon whose name it bears. From the fact that the uterus in Dr. Trenholme's case was easily replaced, and that traction to the extent of two inches gave no control over that organ, Dr. A. was inclined to think that Dr. Trenholme had a fasciculous of muscle-tissue in his grasp and not the round ligament, as supposed. Dr. A. stated that this is a very common error, and that it had happened to himself several times when operating on the cadaver; but from the fact that traction upon this supposed ligament does not control the uterus, if that organ be not fixed, we learn that we have not seized hold of the right structure.

Stated Meeting, April 2nd, 1886.

G. WILKINS, M.D., AND VICE-PRESIDENT, IN THE CHAIR.

Primary Cancer of Pancreas, with secondary deposits in other organs.—Dr. ROWELL exhibited the specimen, and Dr. ARMSTRONG related the clinical history of the case:

Mrs. M., aged 80, widow, enjoyed good health until three years ago. Father and two brothers are said to have died of cancer. Admitted to Western Hospital in December, 1885, suffering from loss of appetite, pain after eating, and vomiting. On examination, a hard, round, circumscribed lump, about the size of an orange, was found occupying the epigastrium, just over the region of the pyloric end of the stomach. As little was to be gained from medical treatment, a mixture containing bismuth, hydroscyanic acid and mucilage was prescribed, and she was removed by her friends to her home. It was learned at the time of her death that since her removal from the hospital the vomiting had continued persistently, the most bland liquids, even water, being immediately regurgitated. She had also suffered much pain, for which she had taken morphia pills. Nothing passed her bowels for two weeks before death, and she became distinctly jaundiced. At the post-mortem examination, 36 hours after death, only the abdoninal cavity was examined. On opening the abdomen, the omentum was found adherent to the anterior abdominal wall. Liver very much enlarged, extending down to level of umbilicus, and containing several large cancerous nobules. Gall-bladder much distended, containing eight ounces of bile and a dark-colored gallstone the size of a cherry. Upon raising the liver, the head of the pancreas was found to be occupied by a cancerous mass, and the surrounding tissues were infiltrated and adherent to it. The walls of the stomach were free from disease. Complete obstruction of the duodenum occurred four inches from the pylorus, caused by pressure of this cancerous mass, together with the adherent and infiltrated tissues about it. A number of the mesenteric glands were also involved. Intestines empty. Spleen slightly enlarged.

New Method for the Relief of Ruptured Perineum.—Dr TRENHOLME read a paper on this subject, exhibiting drawings of the new method, as follows:—This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts, binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever-lamented Dr. Sims introduced his silver suture. The operations of Baker & Brown and others were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city, and, I might say, of this country, endeavored to dissuade a confrere

from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patients cured. This, occurring in our good city, speaks volumes. For my own part, I think the evils resulting from severe lacerations are very great, and if anything I may say will direct more attention to the prevention of these evils I will be satisfied. I feel confident that the sum-total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and varied ligaments share in the same mischief. It is a fruitful cause of retrolaxations of the uterus and prolapsus of bladder. Of all the marital misery and personal distress I need say nothing; these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well-known preparation of the patient required, especially in extensive lacerations; you all know as to this and the after-treatment also. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable, and the restoration of this body is *the one* object of perineorraphy. An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained—without it the natural support of the pelvic viscera is impossible. Not only is there apt to be hernia of the anterior rectal wall, but prolapsus of both bladder and uterus—and this in the order I have given them. The best success heretofore has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together are based upon a right conception of the anatomy of the parts. The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil, each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place, the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded—*i.e.*, the cicatricial surface in *one* piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface—(the dotted line in sketch No. 1 shows this); the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap; this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the shield-sutures (and here I would say a word in favor of the catgut suture which I adopt). It is by far the best, as it gives the greatest possible extent of surface to surface—much greater than can be secured by the interrupted or any other suture. Two deep sutures usually suffice, and these—whether silver, silk, or catgut—are passed in and secured by clamp shot upon an ivory shield. The first suture should be inserted low down, and about three-quarters of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear, and brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up. The last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, and the upper part of the flap and around on the right and left side are secured by catgut sutures; this leaves the united surfaces in the shape of the letter T. The vaginal surface is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by first intention. There is very little pain, inasmuch as the deep shield-sutures allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum, the flaps are carefully brought together by a running catgut suture, and the operation completed as in this case. The objection to all other

operations was that it left the vaginal incision open, which sometimes, therefore, interfered with union by first intention. By my method this is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained: Perfect union, perfect restoration of the perineum, no loss of substance, and no after-fever worthy of the name. Sketch 3 shows the condition of the parts at the completion of the operation.

Dr. Wm. Gardner said that, as a rule, extensive lacerations of the perineum were mischievous, and produced symptoms, yet he had seen many exceptions to this. In numbers of cases, even where some fibres of the rectum have been torn, no inconvenience followed, due, no doubt, to the integrity of the vaginal walls and to individual peculiarity. He had also seen procedentia uteri in virgins and in multiparous women, where there was no rupture at all. The principle of the method advocated by Dr. Trenholme was not new. Hart and Barber had described a similar operation, but denuding in two segments; and Tait, five or six years ago, proposed an operation similar to Dr. T.'s, with the exception of introducing the sutures somewhat different. Dr. Gardner had performed this (Tait's) operation twice, but was not favorably impressed with it. Convalescence was not so satisfactory as when he had performed Emmet's operation.

Dr. Armstrong thought that the different degrees of injury resulting from laceration of the perineum in different cases depended upon the character and extent of the tear. He doubted whether a simple tear of the so-called perineal body, which consisted principally of cellular tissue and skin, was followed by much harm. There was good evidence to the contrary. The evil results charged to laceration of the perineum only obtained when either the pelvic fascia was torn or when the muscular floor of the pelvis was injured, either by a separation of the levator ani muscles in the middle line, or when one or both of these muscles were torn away from their orifice from the rami of the pubes or from the ischial spine. This fact is pretty clearly established by Emmet, by Dr. Schatz of Rostock, and by Dr. B. E. Hadia of San Antonio, Texas. The best operation is that which the most perfectly restores the parts to the condition in which they were before the injury was sustained. Emmet's new operation has yielded good results in the Western Hospital. He was not aware that, so far, any attempt had been made to unite the divided muscles in the median line or to the pelvic fascia.

Lanolin.—Dr. Reed made a few remarks on this drug, a new basis for ointments, introduced by O. Liebreich, obtained from the fat of the keratin tissues, and principally from wool. The very strong recommendations of this cholesterine fat in the articles in the *British Medical Journal* for February would cause it to be extensively tried by the profession. The advantages of rapid absorption and ready miscibility with aqueous mixtures were in a measure confirmed. Manufacturers were preparing for a great demand, and an abundant supply at a moderate price would soon be on the market. A specimen was passed around.

Operation for Intra-uterine Fibroid—Accidental Inversion of the Uterus and Rupture of the Perineum.—Dr. Gardner reported the case as follows: Mrs. ——, childless, was sent to him from Ontario. She had had severe hemorrages for the past five years; of late they had been very excessive, and produced great blanching. On examination, a tumor was found about the size of a child's head, and completely filling the vagina and uterus. *Operation*—The tumor was fixed by an assistant and removed piece by piece by means of scissors, fingers and serregated scoop. Towards the end of the operation, whilst dragging strongly on the remaining portion of the tumor, it suddenly gave way, tearing the perineum and inverting the uterus. The uterus was easily replaced, but sutures were not applied to perineum in order to facilitate irrigation and drainage of the uterus. For this purpose Dr. Gardner always employs the double tubes fixed to the cervix. Convalescence proceeded very satisfactorily for five days, when the temperature rose and diarrhœa set in. This condition persists in spite of treatment. It is feared she has amyloid disease of the liver and other organs, the liver being now enlarged and smooth. She is also passing large quantities of urine containing albumen.*

Progress of Science.

THE TREATMENT OF ACUTE INFANTILE BRONCHITIS.

At a recent meeting of the New York Academy of Medicine Dr. J. Lewis Smith read a paper with

* She died a week later from pleuro-pneumonia.

the above title (*Medical Record*, March 6, 1886.) The subject was considered under two heads : (1) mild, and (2) severe bronchitis. He believes that simple bronchitis could be aborted, or rendered milder, by an emetic employed when the first symptoms appeared. For this purpose ipecac was probably the best. Measures designed to abort the disease, however, were not usually indicated when the patients were first seen; to be employed with success they must be adopted very early.

The treatment for mild, uncomplicated, primary bronchitis was very simple. A favorite mixture of the late Dr. Jackson, of Boston, consisted of equal parts of almond oil, syrup of squills, simple syrup, and mucilage of gum arabic. Of the mixtures in the Dispensatory the mistura glycyrrhizæ composita was the best. The compound syrup of ipecac of the French Pharmacopœia was a most elegant mixture.

When the temperature was 102° F., and above and the respiration correspondingly accelerated, he had been accustomed to use a mixture consisting of sweet spirits of nitre, syrup of ipecac, and syrup of balsam of tolu.

Severe Bronchitis.—When the inflammation involved the smaller bronchial tubes localized atelectasis was liable to occur, and also catarrhal pneumonia, which was one of the most dangerous diseases of infancy.

The indications for treatment in a severe case of bronchitis were to promote expectoration, to diminish inflammation, to strenghten the action of the heart, and prevent exhaustation.

In reference to cough there was safety in it, and he seldom added opium to any of his prescriptions which were designed to relieve cough. Although children did not expectorate, the bronchial tubes were as effectually emptied when the sputum was swallowed. To facilitate expectoration two remedies had been used largely, namely, carbonate and muriate of ammonia; the latter was preferred in most cases, except in the advanced stages, when the former might be advantageous as a stimulant.

A favorite formula for the use of muriate of ammonia with him had been muriate of ammonia, one drachm; balsam of tolu, two ounces. When there was great dyspnœa and indications for clearing the bronchial tubes of mucus, this remedy should be administered every half-hour. Dr. Smith had not witnessed any marked benefit from the use of senega or squill. To get rid of large quantities of mucus an emetic was sometimes proper.

To sustain the Patient and reduce the Fever.—He had not noticed any marked reduction of the temperature by the use of quinine, but it seemed to him that it had been useful as a heart-tonic administered in small doses. For a child one year of age, half a grain to one grain. Antipyrine might be of service, but care should be exercised in its use. In a vigorous infant, suffering from bronchitis without or with only a very slight amount of pneumonia, it might be used. Digitalis as a heart-tonic was one of the best which could be employed. Alcoholic stimulation was necessary in severe cases; two or three drops of whiskey in water, for each year of age after three months, given hourly or every second hour.

External Treatment.—Leeching and vesication have been abandoned. Slight irritation of the surface affords relief, and for this purpose he had been accustomed to use a flax-seed poultice, first rubbing the chest with camphorated oil in young children, and using a mixture of mustard and flax-seed, one to sixteen, in older children, enveloping the chest with the poultice and covering it with oil-silk. In those cases in which there was hurried respiration, accompanied by continued moaning, to cover the chest posteriorly and anteriorly with a poultice, and over the whole place an oil-skin jacket would afford marked relief.

In robust children the application of cold to the chest during the acute stage, as recommended by Henoch, of Berlin, might be of more service than poultices. For all infants under six months of age, however, poultices were preferable.

Change in position of the child he regarded as a most important element in the treatment, laying the child first upon one side and then upon the other, and upon the back.

The chairman invited Dr. A. Jacobi to open the discussion, who said that whenever Dr. Smith read a paper very little, if any thing, remained to be said. There were some points which he would like to impress upon those present, and who would doubtless see more of these cases hereafter. One of the principal points to which allusion had been made, and of which he wished to speak, was the use of *opium* in these cases. We could not do well without opium in many of them, because there was so much irritation; but he would emphasize the necessity of giving as little as possible. If it was to be given at all, give a good-sized dose at night, for the purpose of securing a number of hours of sleep. He would express his conviction that in no small number of cases of capillary bronchitis and acute pneumonia in adults the patients died in part of their disease, in part of the influence of opium. Certainly opium would suppress expectoration, and without expectoration bronchitis and pneumonia were almost invariably fatal.

There was one great expectorant which Dr. Smith had not mentioned, and that was *water*. Where was the expectoration to come from unless there was fluid in the body? It was all well enough to give muriate of ammonia and expect it to liquefy the expectoration; but the liquefaction could not take place without plenty of water, and the chief danger was that water was not supplied in sufficient quantities to young infants, older children being able to ask for it.

Another important point was the regulation of the temperature and moisture of the atmosphere

in the room; this is especially important in all cases of so-called dry bronchitis.

With reference to the use of *digitalis*, he believed that two or three large doses in twenty-four hours were preferable to small doses frequently repeated. A child one year of age would take one grain of digitalis three times a day, for as many days as would be required, and the effect would be much better than if the remedy was usually employed.

Another exceedingly valuable expectorant was *camphor*, the effect of which was permanent, and it was more easily taken than carbonate of ammonia. A child one year of age might take one-quarter, one-half, or even one grain of camphor, rubbed up with glycerin as often as every hour or every two hours, and in bad cases of bronchitis or pneumonia, where expectoration was wanted, he had not seen any expectorant which had served him a better purpose.

Turpentine also, by inhalation, was an excellent expectorant. Put a tablespoonful or two tablespoonfuls of spirits of turpentine into the kettle of water which is kept in the room to moisten the atmosphere, and the air will be impregnated with the vapor of turpentine, which will greatly benefit the patient.

Dr. John C. Peters was asked to continue the discussion, and said that one remedy, which was the best of all expectorants, and which allayed the cough, had not been mentioned, and that was potassium. The form in which he usually prescribed it was the liquor potassæ, one drachm to four ounces of water, which of itself was somewhat soothing. All of the alkalies, but more particularly potash, increased the ciliary movement of the bronchial epithelia, the only way in which expectoration was brought forward where it could be reached by cough. Besides, a solution of potassium would dissolve mucin, while simple water would not. He had almost abandoned the use of ipecac, except, perhaps, in small tonic doses. When there was great congestion and dyspnœa the administration of small doses of calomel, sufficiently large, however, to move the bowels, would relieve the heart and lungs, and render *digitalis* more active than it otherwise would be.

With reference to external treatment, he had used flannel chiefly, perhaps covering the chest with cotton. He thought that the frequent changing of poultices exposed the infant too much.

With reference to change of position, he had been in the habit of placing the child on the face, and had found it very beneficial.

He never used quinine as an antipyretic, but thought it beneficial in preventing the migration of leucocytes.

Dr. Joseph E. Winters said that while, perhaps, acute bronchitis could not be aborted, the inflammation certainly could be minimized. During the time when the congestion was limited to the bronchial artery, remedies which would reduce the force and frequency of the heart's action would reduce the inflammation, and for this purpose he employed veratrum viride, already mentioned by Dr. Ripley, or aconite; as a reliable article of veratrum viride was somewhat difficult to obtain, he frequently used the latter agent. This expectation, however, was realized only in cases of acute primary bronchitis.

After this his method of treatment was to use derivatives, and then mild cathartics consisting chiefly of alkaline mixtures.

The second indication was to prevent accumulation of catarrhal secretion, as here occurred all the deaths. For the prevention of the accumulation of this secretion he used stimulating expectorants, and they varied according as to whether the expectoration was thin or viscid. In this condition cough also become remedial. During the catarrhal stage he combined camphor with other agents in a sufficiently concentrated form to excite a cough, which would, in part, be voluntary. Besides, he applied stimulating liniments to the surface of the chest, which would provoke deep inspiration. For this reason he thought that large poultices were dangerous, and that putting a pound of flax-seed, mixed with water, upon the chest of a child one year of age, would materially interfere with respiration. He preferred the oil-silk jacket, or, perhaps, spongiopylin, with cotton batting and oil-silk. The oil-silk was generally sufficient, with the use of a stimulating liniment, applied by putting the hand under the jacket, without exposing the chest of the child at all. He always insisted upon the following order in most of these cases: First, make the external application, then administer the expectorant, which would excite a cough, and then administer an emetic, and do all this at bedtime.

Opium became a dangerous remedy in young children, and he thought chloral did equally as well. When the secretion was watery and excessive, camphorated tincture of opium might diminish cough and secure rest, but it was not often indicated.

As to whether capillary bronchitis existed independently of broncho-pneumonia, he had his doubts because when capillary bronchitis was found at autopsy it was associated with more or less of broncho-pneumonia.

Dr. H. D. Chapin made special reference to the use of bromide of sodium, which he had used with good results. The use of opium had been pretty well condemned by the speakers by whom he had been preceded; and even in the doses recommended he had seen, it seemed to him, unfortunate results due to its use. In rachitic children he had noticed a more rapid and a more marked narcotic action produced by opium than in otherwise healthy children. In one case he felt quite certain that the brown mixture, regarded as perfectly safe in ordinary cases, nearly caused the death of his patient. For some time, therefore, he had used the bromide of sodium, and, although it did not act rapidly, yet by giving it continuously

it produced a sedative effect, which had seemed to him to be safe and beneficial. He would be more afraid to use chloral than opium.

With reference to cases of mild bronchitis he thought one of the best remedies was to put the child to bed at the outset, and when this was done the large majority of children would get well without special treatment.

Dr. J. H. Fruitnight spoke of the use of iodide of potassium in the second stage of the disease, especially when the secretion was viscid, administered in doses of one-fourth to two grains, according to the age of the child. He favored the use of oil of turpentine combined with balsam of fir. —*Therapeutic Gazette.*

IRRIGATION IN BOWEL DISEASES IN CHILDREN.

An eminently practical article on the therapeutic value of irrigation in treating diseases of the bowels in children is contained in the *Archiv fuer Kinderheilkunde*, written by Monti, the well-known Vienna clinician and specialist in children's diseases. The article is contained in the *Manchester Medical Chronicle* for April and deserves special reference at this season, when we are on the threshold of all the anxieties and perplexities incident to summer diarrhœas and enteric difficulties.

As regards the method of executing the operation nothing special is said. An ordinary fountain syringe, holding from two to four pints, with a soft tube one or two yards long, and a hard rubber nozzle and a stop-cock is used. Soft tubes or gum-elastic catheters can be fitted on. If the fluid is to be retained an obturator is added, consisting of a truncated cone or soft gutta-percha, which is perforated in its long axis in order to let pass the catheter. This cone is oiled and passed into the rectum, where by its expansion it occludes the passage. A low pressure is advised, and suspension if straining is apparent. About 2–2½ inches of soft catheter may be pushed into the rectum in the new-born. Experiment justifies us in saying that practically the whole of the large intestine can be irrigated. The ileo-colic valve may be passed, but only in such cases where abdominal pressure and peristalsis are inoperative.

In speaking of the application of the measure in the special diseases, Monti says, that in dyspepsia the irrigation at once removes tympanites and undigested caseine, half decomposed masses of fat or amylacea in acid fermentation. Colicky pains that prevent sleep and cause convulsions are at once stopped. Simple enemata never accomplish the desired result. The author rejects as useless the much-lauded aromatics, such as camomile, anis-seed and fennel water, that only increase acid fermentations. The quantities of water used should be adequate to fill the whole bowel up to the ileo-cecal valve, and vary with the age and weight of the child. In the new-born, weighing under 6½ pounds, seven to ten ounces are enough; in heavier children, ten to fifteen ounces; in sucklings in the first four months, seventeen to twenty ounces, and so on up to forty ounces. Percussion of the colon tells us when the bowel is filled. If colic comes on, allow the fluid with the gas and solid ingesta to escape; then resume and finish the operation. In chronic dyspepsia the proceeding may be practised twice daily for some time.

In coprostasis the accumulations come away by irrigation, properly done. Some laxative may be injected with the water.

In habitual constipation, not alone accumulated fæces are removed, but also the inertia of the bowel is overcome. The irrigation should be made at a fixed hour and a large quantity of water used. And the temperature of the water becomes an important factor. In the beginning of this methodical treatment the water should be about 86° F., and gradually a temperature as low as 55° F. is to be reached.

The value of the practice in enteritis follicular is denied by Henoch, but Monti is emphatic in favorable recommendation. He says: "Thorough irrigations of the large intestine are indicated in all cases of enteritis without exception, mild or severe, acute or chronic. The regulation of the diet on definite principles, and the irrigation of the bowel, either with water or medicated fluid, chosen according to the indications present, are the only rational measures that can be taken in all cases of enteritis. I treat all my cases of enteritis with nothing but suitable diet, and locally with carefully managed irrigations of the intestine, and only in exceptional cases do I ever give internal medicine. The irrigations must be commenced at once, whether the symptoms are local or general; waiting till the case is more serious is only depriving ourselves of a valuable mode of treatment. There are really no difficulties in the way of any one carrying out this treatment. Large quantities of fluid must be injected. Mere clysters are useless. I begin the treatment of acute enteritis with an irrigation of water. The temperature of the water should vary with the severity of the disease. In slight cases, where the stools are just slimy where the tenesmus is moderate and there is no fever I use water at 72° F., in severe cases I take fresh water from the tap. The first washing out, if properly done, is generally followed by good results; straining ceases, and there is no motion for several hours. As soon as the straining and characteristic dejections disappear an astringent irrigation should be given. One or two per cent solutions of tannin or alum may be used, or a half per cent. solution of acetate of lead. Disinfecting solutions, carbolic, salicylic, or resorcin, do not do good in acute cases. These injections should be given twice a day until the pathognomonic stools disappear. In all cases of chronic enteritis, with putrid dejections, disinfecting solutions of benzoate of soda, boracic acid, resorcin or salicylate of soda should be used, and after the dejections have

ceased to be putrid, astringent or simple irrigations should be employed."

In catarrh of the small intestines, Monti considers the irrigation of the large intestine as only an aid to internal and dietetic treatment.

Also in infantile cholera he believes the irrigations indicated only at the beginning of the attack and before collapse is manifest. In collapse they should be discontinued. Three irrigations at the commencement of the cold stage, either of one per cent. of common salt, or two per cent of tannic acid, and in severe cases a solution of benzoate of soda, 500-100 in 1000 parts, or six drops of creasote in 1000 parts are useful.

Irrigations are indicated in all cases of dysentery and of conspicuous service. Water is first used to wash out the bowel, and cold compresses to the abdomen are made. Iced milk and tea with lemon and rum are given. The next irrigations should be astringent as described for follicular enteritis, two or three a day being administered.

Monti has also employed weak solutions of common salt (a drachm to thirty-five ounces) to remove tympanites in abdominal typhoid fever; the temperature should be about 66° F., large quantities being necessary to secure good effects. Astringent solutions of a mild character benefit profuse diarrhea. No extended trial of the method has been had in this ailment.

Caution is necessary in cases of typhitis or perityphitis; much harm can come from irrigation during the periods of active mischief, when the temperature is much elevated. Also in invagination of the bowels. Unless the seat of it is in the colon, especially the descending colon, and the intussusception is recent and not too extensive, no good can be expected from irrigation. In ileum or ileo-cecal invaginations success is rare. The author advises a warm bath for a half hour of 95° F., previous to the injection, the patient in addition being chloroformed to relax all muscular effort. The pelvis, too, should be raised very high. And to this end we believe that the posture proposed by Cari Nicolaus, the knee-shoulder posture, as described in the *Review*, March 13, 1886, would be a highly proper and useful one. A soft catheter or tube should be introduced as far as possible into the bowel, and the water introduced at a low pressure first. On regurgitation stop the procedure, and then cautiously begin again, increasing the pressure. Use external manipulation at the same time. If water fails to reduce the obstruction, air may be insufflated or carbonic acid water. Luke-warm water should first be used to relax the bowel and enable the introduction of a large quantity of water. The finish may be with ice-cold water to excite peristalsis.

Helminthiasis, also, especially cases of oxyuris vermicularis, pin worms, were successfully treated by the complete irrigations repeated a half dozen times or more on successive days. To clear the small intestine, a purgative should first be given. Medicinal soap, 1-5 parts to 1000 parts of water, is the best irrigation in such cases.

Taenia were also treated by the combined method of washing out the bowel in the morning with 2-4 pints of luke-warm water; the same is done in the evening with the addition of a purgative. Next morning pomegranate is given by the mouth, and, after the first evacuation, a solution containing pomegranate is thrown up into the lower bowel.

The article, all in all, contains many practical points based upon rational thought and actual experience.

THE DIETARY IN INDIGESTION.

By J. Milner Fothergill, M.D. Edin.

When I hear medical men denouncing a regulated dietary in indigestion, my surprise is excited. Is it a malady to be combatted by drugs only? I do not think anyone will support that proposition. Medicinal agents are not without their value; but the medicinal treatment of indigestion is surely but auxillary to the dietetic management. That a regulated dietary is too often a restricted dietary—so restricted indeed that the patient is practically half-starved—may be admitted. But need a regulated dietary necessarily be a very restricted one? I opine not; if the matter of the dietary of the dyspeptic be given a little more attention.

And for this it is well to keep the physiology of indigestion in mind. Digestion is solution by hydration so that the carbo-hydrates and albuminoids may pass through the wall of the alimentary canal; after which they are de-hydrated—else they would pass out by the kidney, giving glycosuria and peptonaria, and leaving the body unfed. But a preliminary to solution is disintegration. If mastiation be not properly performed the "lumps" of food find their way into the stomach and offend it.

Pastry, pieces of hard potato, cheese, are notorious offenders. The solvent action of the gastric juice can exercise no disintegrating effect upon the substances, while they act as irritants and set up pain. A piece of meat comparatively unchewed is less objectionable, because the gastric juice acting upon the connective tissue allows the muscular fibrillæ to fall asunder. But even with muscular fibre there is a wide difference. Pork and veal are hard meats, and, not readily falling to pieces in the stomach under the action of the gastric juice are held, and rightly too, to be indigestible. On the other hand, a thin slice of well-boiled ham, cut across the fibre is very digestible. So is the loose fibre of a sheep's head. This is the mechanical aspect of the digestibility of food. Hard stringy meat is very indigestible. So are ill-cooked vegetables, and especially the cruciferæ, so are hard-boiled eggs.

Fish, and especially white fish, whose fibres very readily fall to pieces, are in repute with dyspeptics for obvious reasons. Fish which are fatty, are indigestible (because the fat resists the

action of the gastric juice) as the flesh of the salmon, the mackerel and the herring. The short fibre of the whiting, "the chicken of the sea," makes this fish especially digestible. Then come the flat-fishes, the haddock and the cod. They all are best boiled, for, if fried, care is requisite that the flesh be not soaked in fat—when it is highly indigestible. There are few more indigestible matters than a fried sole which has not been skillfully cooked. And the same holds good of birds. Chicken and game are digestible, while the duck and goose, greasy-fibred meats, are as certainly indigestible.

Potatoes have an evil reputation, but that again is largely a matter of cooking. A potato which is imperfectly cooked has a hard centre. A "stone" an Irishman calls it—and if palpable pieces of such hard indigestible matter be swallowed gastric distress is the intelligible result. But if the potato be well cooked and put through a sieve it ceases to be indigestible from "the mechanical point of view." It is the question of disintegration which militates against vegetables, and cooked fruit. Pieces of hard apple will sit lightly on the most irritable stomach. The flesh of the grape is in great repute in all conditions of gastric irritability and debility, whether primary or secondary, to some general sickness.

Fat is an offence to a susceptible stomach, even as liquid fat floating about in it; but still more as lumps of fat upon which the stomach can exercise no solvent influence. Hence many persons, children and adults, reject sweet pieces of fat, and (after the meal) take some fishy oil. As the digestion of fat does not commence till the food has left the stomach, it is not well to give fat till its "time draws nigh." Thin stale bread with butter rubbed well in and doubled is much more digestible than the same bread cut thick with a stout layer of butter plastered over it.

Pastry, when fat and flour are well rubbed together, form a most indigestible compound, resisting all disintegration except mastication. Suet puddings also are indigestible.

On the other hand, milk puddings, especially of made without an egg, are in repute, and not without reason, for dyspeptics. They are light and sit easily on the stomach, the farinaceous matter being readily disintegrated, and what escapes disintegration is soft and does not give offence to the stomach.

There is another matter not of accult but of microscopic disintegration, or actual solution which has yet to be discussed—a matter of vital importance. As savage man sat grinding the cereals which form so large a factor in human food, the action of the jaws produced a free flow of saliva, and as fast as the finer particles were broken off the seed, by the crunching of the teeth, diastase of the saliva converted the insoluble starch into the soluble dextrine and grape-sugar. The toil of the miller produces disintegration and relieves the jaws of much of the labor. But disintegration is only the precursor of solution. The starch granule remains. By heat the cook cracks the starch granule so that the solvent diastase can readily act upon it. So far, so good; but heat does something more. It has an actual solvent action, and heat will, if sufficient, cause conversion of starch into dextrine. A thoroughly well baked flour if subjected to the iodine test under a microscope will readily show this.

When a large quantity of raw unconverted starch enters the stomach it is a burthen to that viscus. The gastric juice has no effect upon starch, and the starch granules merely embarrass, the action of the stomach until they find their way out of it by the pyloric ring—and sometimes by the way they entered, viz., the gullet. Undigested starch hampers the stomach and makes the labor of that viscus a painful toil to it. New bread is a gross mechanical irritant, resisting disintegration. The impediment caused by isolated but numerous starch-granules is another matter. Biscuits and crackers, if insufficiently masticated, cause indigestion. So do cakes which have not long been exposed to heat. The cakes which are held in such favor by the breakfast table in American households have been regarded as indigestible, and a glance at an American cooking book explains why. These cakes are exposed to heat for from thirty to forty minutes only. [The language of England sometimes requires translation. For cakes read rolls, and for biscuit read cracker. —ED.] A good biscuit or loaf is much longer in the oven. Potatoes are indigestible as ordinarily eaten, because they are not long exposed to heat. But if well mashed potatoes be put into the oven to brown, or be placed before the fire for that purpose, the longer exposure to heat tells upon the starch-conversion.

Hominy that is well-boiled or subjected to the final heating process of cooking is decidedly digestible. Cereals that have been steam-cooked are in repute with dyspeptics either for adding to meat teas, or for preparing milk-puddings. Some cooks who have to cater for dyspeptics boil all their rice, sago, and tapioca thoroughly before making these up with milk for a milk-pudding. In Germany pearl-barley thoroughly well boiled and passed through a sieve is in request as an addition to meat teas for invalids. The porridge of Scotland, being made with coarse oatmeal, is boiled a long time, while in England a short boil is enough with the fine ground oatmeal in vogue there.

The advantage of the numerous prepared foods —whether babies' food or invalids' foods—which are all more or less compounds of starch which has been to a certain extent predigested either by baking or the malting process, lies in their ready digestibility. A touch of saliva is enough to complete the conversion of such carbo-hydrates, and the soluble matters pass out of the alimentary canal, and the stomach is not burdened with a weight of undigested starch impeding its work.

Gross and fine disintegration of food are cardinal matters in the dietary of dyspeptics.

Mastication must be perfect, else gross particles embarrass the stomach. Starch granules which have escaped the saliva interfere with the solvent action of the gastric juice on albuminoids. The dietary of dyspeptics must be conducted on the above lines; and if the dyspeptic were properly informed he could find a sufficient variety of food; but if he be told to diet himself upon a numbea of articles of food he soon begins to loathe them and often goes without food sooner than partake of them.

Of course there are dyspeptics and dyspeptics! Some only require to give a sufficiency of time to the process of mastication to be free from suffering. Others must eschew pastry, veal and pork. Others again have to abandon solid meat and vegetable and adhere to meat broths, with cooked starch, malt-extracts, malted preparations, milk puddings and fish. When the stomach has been outraged or offended care is requisite for its restoration. When there is present a condition of general exhaustion food will disagree which ordinarily can be taken with impunity. When a condition of acute indigestion is set up a very careful dietary for a few days is directly curative.

Ready disintegration and solubility of food constitute the base line of the dietetic treatment of indigestion.—*Journal of the Reconstructives.*

FOOD IN THE TREATMENT OF NEURASTHENIA.

By J. A. GUNNING, M.D., New York.

Neurasthenia is a peculiar condition brought about in two ways: First, by the hurry and bustle and severe mental strain of this age. Second, through the ignorance of the majority of human beings as to the physiological action of foods.

At the time we are consulted as to treatment, we find that the symptoms presented are dependent upon an extremely low condition of vitality throughout the entire chain of systems, more particularly that of the digestive and circulatory. Upon inspection of these patients we find a lack of vitality, tone, elasticity, color of skin, and a loss of flesh, or that peculiar enlarged under-nourished tissue, having the appearance of flesh, but really indicating a condition worse than loss, and one notes also a peculiar condition of the brain, vacillating between an unnaturally active and excitable condition, to one of quiet, melancholic depression and moroseness. The organ that is the greatest sufferer, and one upon which all others depend to a very great extent, the stomach, the first great reservoir or receptacle of tissue supply, is in a correspondingly low type of inactivity and uselessness from loss of vital force, consequently, its action is impaired, its products are of inferior quality, its solvent powers are impeded, either from a defective supply or a deficit in quality. Hence, all the tissues fail to receive their proper amount of nutrition, and the supplying corpuscles, in consequence of this loss, lose their ability, and, necessarily, their power to work, and begin to deteriorate; white ones take the place of red, causing two very trying things to contend with, the already enfeebled corpuscle being unable to transport a supply of building material to the tissues, is also incapacitated to bring on its return, the worn out, disintegrated material that ought to be eliminated, instead of which, it is absorbed, or, by some caltalytic action, exercises its poisonous influence upon the nerve centres, thereby still further interfering with, and cutting off their stimulation, and hurrying on the condition of starvation, and placing the economy in this extremely trying position. No material for rebuilding, and no means of supplying it, even if it had it under he circumstances mentioned. How can a wagon without bottom or sides carry a load? First thing to do is to mend the wagon. How is it to be done? Put life into the corpuscle by carefully selected materials. This cannot be done by bromide, belladonna, strychnine, etc., for reasons already given, but by life-giving properties.

When examining patients for a cause among his histories recorded, I find that it extends back into the past and that the principal cause was the penalty of transgressing the natural law governing the supply of proper renewing material through the digestive system. By way of illustration, I beg to present an ordinary history of these cases about as follows: The patient will say: "Years ago when I became very much interested in my business, circumstances were such that I had to devote a great deal of time and individual attention to it, and so wholly absorbed would I become that meal times were entirely forgotten, and I would go an entire day without eating, and even should I take the meals I felt my time was so precious that it was only wasted, and as a consequence I ate as hurriedly as possible, only partially masticating my food, and at night, between indigestion and the pressure of business, I slept but little; still I thought it was not injuring me, and kept on in the same careless way. Now I have succeeded in accomplishing what I was striving for, but am in no condition to enjoy it. What shall I do?"

Believing, as I do, that in most cases of Neurasthenia the condition is one of actual starvation, I will now consider the remedy. This consists in proper feeding. The remedy is not a new one, but how much time do we give to the thought of nourishing our patients, or bother our heads, especially about the tissue or tissues involved, and the physiological needs of the system. As a rule when beef tea, mutton broth, milk and eggs have been suggested, we leave it entirely to the patient to make the choice, and they select the most palatable, and so leave them. Food is as much a therapeutic agent as any of the materials called medicine, and if we were to devote one-fifteenth of the time to therapeutical research that we do for pathological we should soon have less pathology to investigate.

Very little reasoning is required to show that there ought to be a close chemical relationship be-

tween the food eaten and the tissues which it is designed to build up and the ever impressive fact that the tissues are constantly undergoing change and being thrown off through the lungs, kidneys and other excreting organs show that unless this supply of renewing material is of the proper kind, quality and quantity, we have a wasting that will be more rapid than repair. In this enfeebled condition what food is demanded and how administered? We find that of all the materials furnished for a complete nourishment of tissue, milk is the best, because it contains material for every kind of tissue, hair, skin, bone, muscle, nerve, and it is the first form received into the body. Any other food then would only act as a foreign agent producing death. When we have a condition of worn-out, partially operating tissue that cannot use general food, milk should be substituted and used, and, in the use of it, it is quite as necessary to watch its effects as upon the infant. When not received or becoming burdensome, dilute with water or add antacids or digestive ferments until it begins to be acceptable to the stomach and not causing distress, and by carefully watching you can judge how much and how frequently to order it. Patients vary from one teacupful to two teacupfuls every hour and a half to three hours. The next article is chopped beef in connection with milk because it furnishes the important part of a more concentrated albuminous food, and, lastly, taking advantage of the researches of chemistry, the beef peptonoids carefully given in small quantities often repeated, are a great saving of wear, as they contain the materials for renewing and are more easily assimilated.

The application of these foods I divide into three classes or divisions that I make in this disease. In that class that complain of weariness, easily fatigued, no appetite, fair form or weight, rather disposed to restlessness, I employ milk used as a drink during the meal in lieu of tea or coffee, and insist upon the time of thirty minutes being devoted to each meal. Exercise or short walks and light gymnastics may be commenced in a mild way and gradually increasing them until a certain gentle stimulation is felt, with a little recognized line of medicine such as phosphorus, maltine and strychnia. The second class of patients, that are pale, feeble and thin with a general wasting away of tissue (not only by absorption, but by actual breaking down) I add to the milk chopped or ground meat. I use chopped or ground meat because if the patient is careless, and swallows his food without chewing, the stomach can manage it better than in lumps. One of the most trying habits to overcome and requiring close watching is this of hurriedly putting the food into the stomach without being thoroughly masticated, and I always require them to rest after each supply of food an hour to an hour and a half. The next, or third class, is more complex and the most trying. In this we have the blending or grafting on of an hysterical condition upon the already low condition of neurasthenia presenting symptoms of both, and requiring a treatment for both. It is needless to say that it is not an easy thing to carry out this treatment. First, they require to be very closely examined to see that they are free from what is generally called organic disease (a difficult matter in some cases, to tell where the functional ends and the organic begins), and we should be very careful in selecting the cases on this point. I think the great error is carelessness in this matter, and consequently the reason we have so much fault found with the plan of treatment. An important and necessary condition to further the effect and to apply the treatment properly is absolute isolation, with complete and continued rest in some regularly appointed or arranged place. Dr. Mitchell, who first suggested the combined plan, says: "It is rare to find any of this class of patients described so free from the influence of these habitual surroundings as to make it easy to treat them in their own homes.

"It is needful to disentangle them from the meshes of old habits, and to remove them from the contact with those who have been willing slaves of their caprices. I have often made the effort to treat them in their own homes and to isolate them there, but I have rarely done so without promising myself that I would not again complicate my treatment by any such embarrassment. Once separate the patient from the moral and physical surroundings which have become a part of the sickness, and you will have made a change which will be in itself beneficial and aid in the treatment, using all the forms of food mentioned, milk, ground beef, peptonoids with a general line of mixed diet. The mechanical means in inducing the assimilation of food from the very commencement, is massage; properly applied in a cautious way until it is applied over the entire body, carefully and thoroughly.

Never use massage unless you can secure rest for your patient, varying from a period of not less than one hour thereafter, and this rule will apply to all cases where massage is used. In the first class I mention, it is only necessary to apply it to the upper extremities, because the lower have all the exercise necessary if the walking is kept up.

The second need it for a longer period and more generally, while the third class, need it twice daily, morning and night, or when the food seems burdensome, for a period varying from forty-five minutes to an hour at each time, with complete rest in bed.

The following will illustrate the mode in which I treat an ordinary case of neurasthenia, belonging to the second class in which I feed and give a limited amount of massage.

Foods used at the beginning of treatment:

1. *Milk*, diluted or pure.
2. *Chopped or ground meat*, (principally *beef*) made into cakes and broiled to a slight brown tint.
3. *Beef Peptonoids.*
4. *Bread* with plenty of *butter.*
5. *Thin Soups*, made from *Beef Peptonoids*, or to which the *Peptonoids* are added.
6. *Eggs*, small amount.

Diet for a Day Third Class:

At the beginning I order half to one goblet of milk every two or three hours, alternating with beef peptonoids in soup form. These peptonoids I generally give stirred into soup or broth, or even in the milk, sometimes a little pepsin or lactopeptine is given. I do not find that peptonised milk is agreeable to patients.

Later, after digestion is better established, I put patients on a diet somewhat as follows:

7 a.m.—One cup of strong coffee with sugar, but no milk.

8 a.m.—Chopped meat, steak or chops, one glass of milk, bread and butter, thoroughly baked potatoes, vegetables in season.

10 a.m.—One goblet of milk.

11 a.m.—Massage.

1 p.m.—Dinner of meat, potatoes, vegetables, light farinaceous pudding.

5 p.m.—Goblet of milk.

7 p.m. Light supper, with stewed fruit, not very sweet, bread and butter.

9 p.m.—Goblet of milk, sometimes a small steak.

If this treatment is carefully and thoroughly carried out one will be greatly pleased and surprised to see these listless, feeble, thin, pale creatures gradually transferred into rosy, well-formed, cheerful, renovated and able beings, ready again to combat the vicissitudes of life and care, with an elastic skin, bright eyes, rosy hue, digestion good, blood red and increased in quality and quantity, minds clear, buoyant, cheerful and happy.—*Journal of Reconstructives.*

A FEW PRACTICAL OBSERVATIONS ON VACCINATION, THE PRESERVATION OF LYMPH, AND OTHER POINTS.*

By Enoch Snell, F.R.C.S.E.

District Medical Officer and Public Vaccinator for Nottingham.

Mr. President and Gentlemen,—I propose in this paper to consider not only the manner which experience has shown me is the most appropriate method in which vaccination should be performed but to treat of the preservation of lymph, some of the objections that may be urged against vaccination, and, lastly, to refer to the question of vaccino-syphilis.

In the first place, let us consider the operation of vaccination and the preservation of lymph which my own experience as a public vaccinator has taught me to be of practical importance.

Use a plain bleeding lancet for vaccinating, it being the most readily cleaned. A sewing needle is a convenient substitute, it is always at command, is found in every house, and, being only used once, cleanliness is insured.

Make the punctures or scratches on the child's arm as far apart as possible, having regard to the appearance of the arm from the position of the cicatrices in after life; by attention to this the vesicles are less likely to coalesce. Without adopting this precaution much trouble may follow, especially in scrofulous children.

In summer the formation of the vesicle is more rapid than in winter.

Three months is stated to be the best age for performing the operation, but I decidedly think above this age to be preferable, between the fourth and fifth month.

The risks of vaccination are undoubtedly increased by opening the vesicles, and unless lymph be required, such a proceeding is most unjustifiable. Never under any circumstances postpone a vaccination without certifying such postponement, as, if the child be taken to another for the performance of the operation, and information withheld, the vaccinator will obviously be placed at a disadvantage. Be very careful not to take too much lymph from a single vesicle, as by so doing irritation is produced and erysipelas and other complications may follow; and never under any circumstances countenance the use of vaccination shields.

I will read an extract from a letter which appeared from me in the *British Medical Journal* last year which expresses my views in respect to these potent agents in the spread of erysipelas, &c.

"As regards vaccine shields, I look upon them as a source of harm, and sometimes of actual danger to the children upon whose arms they are used, and, personally speaking, I do not know a single good point in their favor. The shield, to hold it in its position, has to be tightly tied round the arm, which obstructs the circulation and produces more or less congestion in the immediate neighborhood of the vesicles, and this, I need hardly say, it is most necessary to avoid. On the other hand, if the shield be not tightly fixed, it moves about on the arm, and its hard and dirty edges coming in contact with the vesicles, rub them into open sores, and probably inoculate them with impure discharge from another child's arm, as, *and I make a strong point of this*, in poor localities the mothers are in the habit of lending them to one another."

I was called to see, not long since, a child I had vaccinated in this town, and was let in for a fair share of wrathful indignation. It was suffering from erysipelas, which soon assumed a serious character. I was at a loss to account for this disorder, knowing the origin of the lymph, and having used it also for three other children, all of whom had done well. I discovered one of these objectionable shields in the room, which I found on inquiry had been sent in to the mother by her next-door neighbor, with full instructions as to its use and with an earnest entreaty that she would use it for her child, as she had done for hers a few weeks before.

Just a word in respect to the treatment of vaccine vesicles.

I always urge upon the mothers who bring their

*Read before Nottingham Medical Society.

children to my station, on no account to use any moist application, but, on the contrary, to let the vesicles dry and form a scab; and, if there be a tendency in the vesicles to "run," then to dust them well with powder of oxide of zinc. In cases of tardy recovery, especially those associated with an eczematous condition, I find an invaluable remedy in this ointment:—

Unguentum hydrargyri ammon. 3 j. to
Unguentum plumbi carbonatis ℥ j.

Of this prescription I cannot speak too highly, for it rapidly promotes a healthy appearance in the vesicles.

Dr. Sinclair (I think of Edinburgh) has lately suggested the use of white blotting paper, when the vesicles remain moist for a considerable time. But I have no experience in its use.

The Preservation of Lymph.

Much has been written in respect to the preservation of lymph, both animal and humanized.

Humanized lymph preserved in tubes soon becomes inert, and after being stored for a few weeks, *always* fails to produce when used, *typical vesicles*. This is a startling opinion to express, and I am conscious that I make it before those who are accustomed to use lymph after being preserved in this way for months. But my opinion is based on a long experience; and I never obtain with lymph stored beyond a few days such typical vesicles as those produced by it in its fresh state.

Lymph in tubes may be preserved for a far longer period, if the precaution of keeping them in a cool place be adopted. But even then the results are not satisfactory.

Warlomont says:—"Vaccine may be preserved in tubes for ten, twelve, or fifteen months, but to say of a thing, that it may be, is not to say that a always or often happens." And he mentions it test case between two vaccinators. He says: "We vaccinated together, and for purposes of comparison, an equal number of children, some from arm to arm, others with vaccine preserved in tubes. The difference in the two modes was apparent in the result. The second produced about half as many vesicles as the first, although the vaccine in tubes had not been taken a month."

How then can lymph be best preserved to suit our requirements? For we must have it ready at hand.

On July 21st last I took some vaccine in tubes from a carefully selected vesicle, and sealed them. I also took some of the *same* lymph in my watch glass, mixing it with about 25 per cent. of glycerine, covering it over with another glass, and placed them in a pill box in a cool cellar.

On October 16th I vaccinated from both sources obtaining, as I expected, my accustomed ill-success from the tubes; but after thoroughly stirring up the lymph preserved in glycerine with a lancet, I obtained from it as good results as if my vaccination had been performed with fresh lymph.

The result of this experiment may perhaps induce some of you to try the same method of preservation, and your results will, I have no doubt, be equally gratifying.

At what period in the development of the vesicle is it best to take lymph for preservation?

For all practical purposes the eighth day does very well, but in hot weather a little earlier is preferable, as lymph taken from vesicles too fully matured is liable to fail.

THE PROPHYLAXIS OF ASTHMA.*

By David W. Yandell, M.D.

Many years ago, when Trousseau was urging the value of belladonna in the treatment of spasmodic asthma, I began its use in certain cases where the disease affected children. Occasionally I got good results—occasionally failure. Subsequently, when the bromides were brought prominently forward as antispasmodics, and, combined with belladonna, were so much used in the management of whooping-cough, I begun, as some one had suggested, the administration of the bromide of potash and atropia as a prophylactic in asthma. The results have been so satisfactory that I wish to ask attention to the treatment.

What I am about to say applies exclusively to children, for, as seen in adults, asthma has usually existed so long that it has wrought changes in the pulmonary apparatus quite beyond the control of the remedies under consideration; and, even in children, the full good of the drugs is only obtained when these are given with the utmost regularity during long periods of time, and in doses sufficient to produce their distinctive physiological effects. Under these conditions, conjoined to certain hygienic measures which I will mention further on, I am persuaded I have prevented asthma from fixing itself on many subjects who, otherwise, would have become permanent sufferers from this dismal affection.

Perhaps, by describing the management of a case, I shall be able to put what I wish to communicate in the fewest words:

One night in July, 1865, I saw a well-developed girl, six years old, in a sharp asthmatic seizure, which was soon relieved by a few doses of tincture of lobelia. I found that for two years before she had been subject to such attacks whenever she caught cold, and that the paroxysms had gradually grown more frequent, less and less "cold" being required to excite them. She was usually much worsted by a seizure, two or three days elapsing before she felt fully well again.

At my next visit I directed ten grains of bromide potash to be given in a glass of seltzer water every morning on rising and at bed-time. To the latter dose was added the one hundred and twenty-fifth

*The notes of which this paper is an abstract were made in the main while the writer occupied the chair of the Theory and Practice of Medicine in the University of Louisville.

of a grain of sulphate of atropia. The mother was instructed as to the pathogenic effects of the medicines. Two days after it was found necessary to increase the bromide by five grains at a dose, which soon produced anesthesia of the fauces, when the quantity was reduced to twelve grains, an amount which was not exceeded. Dryness of the throat and slight dilatation of the pupils followed after four days' use of the atropia. This medication was continued steadily for three months. Throughout the greater part of this time, the patient had iron and strychnia after food. the was required to live in the open air and take a cold sponge-bath daily. She was provided with a cough mixture containing a considerable quantity of opium, and her mother directed to use it on the appearance of the first symptoms of a cold. She had, in the period named, but two attacks of asthma, both slight. In the ninety days preceding the treatment, she had five attacks. The treatment was now suspended for a fortnight, when, the weather growing cold—this was in November —it was resumed and continued for the succeeding four months. In that time she caught several slight colds, but had no asthma until in March, when, after a wetting in a sleet, she had a mild seizure that yielded to five grains of Dover's powder. This was her last attack. For the next four months the medicines were given fifteen days in each month, and then omitted until the following December, when they were given uninterruptedly for sixty days. Ten months having passed without a seizure, notwithstanding the patient had suffered several sharp catarrhal attacks in the time, further treatment was deemed unnecessary. It is proper to add that the patient made no change of house, and had practically the same surroundings during the entire time. She remains free from asthma to this day.

Since this case I have treated, by the same method, eight other cases of asthma in persons aged respectively three, ten years; two, eleven; one, twelve; one, thirteen, and one fourteen years old. All recovered but two, and in neither of these was the treatment fairly carried out by the parents. None were dismissed under fifteen months, while two were under treatment for two years.

In five of the nine cases, the disease was hereditary. Eight of the nine were unmistakably neurotic. Perhaps this fact may serve as an explanation of the success of the treatment.—*American Practitioner*.

THERAPEUTIC.

Copis tecta, a plant native of China, has been found to slow the pulsations of the heart similarly to digitalis, so that we have another addition to our cardiac sedatives.

Capparis Corriacea, a native of Peru, in the shape of an infusion, three drams of the powdered fruit infused in red wine being the dose, has been found useful in epileptic, hysterical and other similar disorders.

Salix nigra in fluid extracts is much lauded as a sexual sedative, being used in ovarian irritation and in some cases of dysmenorrhœa where there is a sexual excitement.

Urtica urens, a decoction made from the common stinging nettle, is strongly recommended by Rothe as a local hæmostatic.

Parthenine, from the Cuban plant known as parthenium-hysterophorus, comes forward as a new anti-periodic. It appears to have great power to reduce temperature in fever, in the maximum dose of thirty grains.

Peroxide of hydrogen is reported to have produced excellent results in the treatment of diphtheria. It may be administered with glycerine.

Capsicum annum will be found of great service in alcoholismus, where there is a great restlessness, burning in the stomach, and coldness between the shoulders.

Phormium tenax, a botanical product of New Zealand, bids fair to prove a valuable auxiliary to the surgeon, in producing healthy granulations in wounds.

Chronic acid, ʒ i to aqua ℥ i applied locally at intervals of a week, is said to be an excellent remedy in endocervicitis.

Myrtle, an ounce of the leaves of the common variety, boiled in a litre of water, is said to be an excellent injection in the treatment of leucorrhœal discharges.

Antipyrine still holds its place as an antipyretic, and it has been successfully used in scarlatina, in five grain doses every hour, in children. Good results are said to follow its alternation with digitalis. Sweet spirits of nitre is incompatible to antipyrine, the combination forming a blue aniline.

Adonis vernalis is claimed to be superior to digitalis and to convallaria, in many cases of cardiac disease. It is said to be powerfully diuretic, and not cumulative in its action. It is used largely in chronic heart diseases.

Electricity is said to be a most reliable agent in increasing the secretion of milk. Both currents are allowed to pass through the breasts for fifteen minutes twice a day.

Kali chloricum is recommended by Dr. Richard Hughs in simple stomatitis.

Stigmata maidis is extolled by Dr. Burt in angina pectoris, when the pain is increased by ascending steps.

Iodol is highly spoken of in syphilitic and other ulcerations, where there is no gangrenous tendency. Buboes are injected with a solution of one part iodol to sixteen of alcohol and thirty-four of glycerine.

Aluminium acetico-tartaricum is claimed as a new specific in ozœna. The dose is one teaspoonful of a fifty per cent. solution in one-half to a pint of water, we presume applied locally.

Pichi (fabiana imbricata), native of Chili, is said to have a wonderful effect upon the formation

and discharge of renal and vesical calculi. The profession will be glad to add to their armamentarium in this tedious affection.

Ichthyol, in thirty per cent. solution, is said to relieve the severe itching of senile prurigo, and a ten per cent. solution relieves pruritus. Four tablespoonfuls a day, of a one per cent. solution internally, has relieved the worst cases of gastritis.

Trypsin (Fairchild's) is now offered as a solvent for diphtheritic membrane. The well-known properties of the pancreatic juice give the strongest grounds for anticipating success in its application for this important purpose. Trypsin acts quickly and powerfully upon fibrin and fibrinous membranes. It is not dependent upon the interaction of acid, as is the case with pepsin. It is most active in a slightly alkaline media. It may be applied by spray or brush. In practical use the results have been very encouraging. It may be obtained of the principal drug houses in this country, and is dispensed in ½, ¼, and 1 oz. bottles, with full directions.

*** Demange says (*L'Union Medicale*) that diabetes insipidus is best treated by valerian, in doses of two to four drachms of the powder per diem. —*Technics.*

MANAGEMENT OF BREECH PRESENTATIONS.

At a recent meeting of the New York Academy of Medicine Dr. Robert A. Murray read a paper with the above title (*N. Y. Med. Jour.*, March 13, 1886), which dealt principally with the measures necessary to be taken to deliver in breech cases and to diminish the percentage of mortality. The importance of an effort in this direction was apparent from the fact that the statistics quoted from authorities gave a mortality in breech presentations of about one in eight and a half cases. Among the causes of this class of presentations were a contracted pelvis, an excessive amount of liquor amnii, violent movements, and a peculiar formation of the lower segment of the uterus. It was also remarkable what a large proportion of the cases occurred in premature labor and multiple pregnancy. The statistics of Simpson went to show how frequently, the child being dead, the loss of tonicity of the spine and the presence of flaccidity in the tissues caused malpresentations. Those tables demonstrated that there was a constant tendency after the sixth month of pregnancy for the head to present.

In a case of breech presentation in which the mother's pelvis was of full size and regular form, and the child of moderate proportions, labor would probably be accomplished without particular difficulty, and the obstetrician had only to wait. If, however, the indications were that the labor would be difficult, if the pelvic cavity was not roomy, or the child of large proportions, version, if it was to be performed, should be done early, before the rupture of the bag of waters. If the case was allowed to progress, no obstruction being met with, the critical moment for the child would be just after the birth of the trunk and lower extremities, for now the cord was in danger of becoming compressed between the unyielding head and the pelvic wall. The cord should be pulled down and placed next the sacro-iliac synchondrosis by the side of the child's head, where it would be least likely to become compressed. The contractions of the uterus might be followed up by the hand, and flexion of the head might be aided by rising the trunk of the child. But in cases in which the limbs were extended upward over the front of the child, so that the toes were near the face, the breech was not nearly so large as the child's head, and, being readily moulded, entered the pelvic cavity; the entire fœtus then presented, as Barnes had well described, the form of a wedge with the base upwards. Now, if traction was made by means of hooks, fillet, or forceps, and unsuccessfully, as it was likely to be, the apex would be dragged into the pelvis, and, the cavity becoming more tightly filled, compression of the cord would be increased and the uterus rendered more irritable, and here the only measure for the safety of the mother and child was to bring down a foot. The use of the blunt hook to do this was difficult, as it was apt to slip and injure the soft parts or cause fracture of the thigh; consequently, if the child was living, it should not be resorted to. The fillet, if it could be guided over the limb, might cut the tissues or prove too weak to overcome the difficulty. The obstetric forceps had been recommended in these cases, but it was condemned by most authorities. It was only adapted for use on the head. The performance of cephalic version, recommended by Spiegelberg, would be possible only before rupture of the bag of waters and before the breech became wedged.

The clear indication in such a case was to break up or decompose the obstructing wedge, which was to be done by bringing down one foot. The position of the breech in relation to the pelvis having been determined by ordinary diagnostic points, the hand was to be passed in front of the breech where the foot lay, and one foot seized by the instep and brought down; then the breech would probably soon descend. The cord would be better protected than if both feet were brought down. The foot nearest the pubes was most easily drawn down. If the case was not otherwise complicated, the labor would now go on naturally. If the breech filled the brim, or was forced into the pelvic cavity, little space would be left for the operator's hand, and under these circumstances the hand would would have to be passed up to the fundus uteri in order to grasp the foot. That hand should be introduced whose palm would touch the abdomen of the child when introduced. When the foot was reached, preferable the anterior one, it was seized by the instep and drawn down out of the vulva. It was essen-

tial to get hold of the foot; taking hold of the knee or hooking the thigh in the groin, would be of no use. During the operation the uterus should be supported by the other hand or by an assistant. If inertia uteri should now exist, we should still have attained, by our hold on the foot, security for further progress of the case.

The operation of extraction by the breech might be divided into: 1. Drawing the trunk through the pelvis. 2. Liberation of the arms. 3. Extraction of the head. Traction on the leg should be carefully made, in drawing the trunk down, coincidently with the pains. The trunk should be drawn downward and backward in the axis of the brim, external pressure being made by an assistant, the traction being kept up until the breech was fairly in the pelvic cavity. After the extraction of the breech, the chord should be carefully looked after. Liberation of the arms might become necessary if the pelvis was at all contracted, or if traction upon the trunk had been too rapid or had not been accompanied by external pressure on the uterus.

The head being at the brim, Smellie's method might be employed in the manner recommended by Schroder, or the method of Scanzoni. In all cases of breech presentation the forceps should be at hand ready for application to the head if it should be necessary. Particular care should be taken during its introduction not to lacerate the cervix. Passing a catheter up into the mouth of the child at this stage would frequently save life.

The subject of the management of breech presentations had been brought to the author's mind forcibl during the past year from the number of cases which he had seen in consultation, in nearly all of which he had found difficulty arising from flexion of the legs on the abdomen, diminishing the size of the breech to a certain extent, and at the same time forming a wedge that became more tightly impacted as the child descended. In all of these cases unsuccessful efforts had been made to extract before he was called, and he was impressed with the advantage of introducing the hand and bringing down the foot over other methods, such as the use of the forceps, the blunt hook, the fillet, etc.—*Theraputic Gazette.*

INHALATIONS IN PHTHISIS.

I have employed, at different times, a large number of inhaling fluids and many different combinations. The fluid and combination to which I now give the preference is creasote and alcohol, equal parts, to which I also frequently add a like proportion of spirits of chloroform. This combination is certainly very useful in allaying cough and modifying the quantity and quality of the sputa in pulmonary phthisis. I therefore recommend it very warmly. The alcohol if added to the creasote for the double purpose of diluting it and making it more volatile; the spirits of chloroform are added, in view of the experience of Dr. Cohen, of Philadelphia, to diminish local irritation and excessive cough. The inhaler must not be worn too long at first, nor should too much fluid be poured on the sponge at any single time. In either event, instead of giving relief, disturbance is caused; the throat is rendered more irritable, and the patient complains of increased soreness and tightness in the chest. Properly and judiciously employed, the creasote inhalent relieves symptoms notably, and in the beginning, at least, of pulmonary phthisis, is, I believe, a means of decided utility so far as the possible arrest of the disease is concerned. It is important that beechwood creasote be used. At first the inhaler should be worn ten to fifteen minutes every two or three hours; afterward, it may be worn half an hour or an hour at a time, or even longer. When the length of time is gradually increased, only positive benefit will result. From ten to twenty drops of fluid should be added to the sponge at any one time. If more is added, it will cause undue irritation. The fluid should not be poured on the sponge more than two or three times in twenty-four hours. Precisely the way in which creasote is most useful is, perhaps, difficult to state. By its antiseptic action it is possibly destructive of bacilli; by its local action and general effect it is certainly of value in combating catarrhal conditions. Where purulent cavities exist it tends to destroy or neutralize putridity. These are certainly sufficient good reasons for its use without pursuing the inquiry further. At all events these inhalations do good. The physician notices it and the patient affirms it. In many instances they allay cough better than any cough-mixture, and they are certainly free from the great objection of destroying appetite, as opium and morphine so frequently do.—*Dr. Beverly Robinson in N. Y. Medical Journal.*

OBSTETRIC.

Cold Water in Labor.—(*Med. and Surg. Rep.*) The only reliable oxytocic that I have found in my obstetrical practice is cold water. Its efficacy in exciting contraction of the uterus in post-partum hemorrhage is well established; and its superiority over other agents in hastening labor with less danger is shown in the cases reported by Dr. H. Garvin (who was the first to call attention to its efficacy in this direction), and also in several which have occurred in my own practice. I think if this method was more frequently employed we would have less rupture of the os uteri or perinæum, and less post-partum hemorrhage. I cannot better explain the action of cold water to the uterus than in the language of Dr. Garvin: Cold when brought in contact with the surface, though locally depressing, through its communication with the nervous centres, acts as a stimulant affecting the whole system or only certain organs, according as it is generally or locally applied. All are familiar with the effect of cold water sprinkled upon the face in attacks of syncope, also

its more powerful stimulant influence upon the brain in narcotic poisoning. It does not act as ergot, producing by its toxical influence on the nervous system an abnormal and dangerous stimulation of the parts which are affected by it, but the reverse; the dormant or flagging powers are, as it were, awakened to renewed action, a normal state of affairs is re-established, and the functions are carried on as they were previous to their failure. The following mode of using this remedy is recommended: The water should be cold; it is not necessary always to have ice-water, as Dr. Garvin suggests; but, if convenient, it is preferable. A towel should be dipped in it, and wrung until only sufficient water remains to wet the parts to which it is applied; this should be quickly placed upon the abdomen, so that as much of the cold will remain as possible; the cloth should be changed every five or ten minutes, or as soon as it becomes warm.—*Technics.*

THE MANAGEMENT OF PLACENTA PRÆVIA.

Dr. Malcolm MacLane offers the following rules as those which should best govern the treatment of placenta prævia (*Amer. Journ. Obstetrics*, March 1886):

First.—In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest,—body and mind,—and a mild opiate is often desirable at this stage to quiet irritation.

Second.—Inasmuch as the dangers from hemorrhage are greater than all else to both mother and child, at the earliest moment preparations should be made to induce premature labor; and labor being once started, the case should be closely watched to its termination by the accoucheur.

Tihrd.—In primiparæ, and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

Fourth.—In the majority of cases generally, and in all cases especially where there is reason to believe that rapid delivery may be required, it is more safe to rely upon the thorough continuous hydrostatic pressure of a Barnee's dilator than on pressure by the fœtal parts.

Fifth.—Where the implantation is only lateral or partial, and where there is no object in hurrying the labor, bipolar version, drawing down a foot, and leaving one thigh to occlude and dilate, the os may be practised according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

Sixth.—The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

Seventh.—In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

Eighth.—In some cases, in the absence of sufficient assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions and the voluntary efforts of the mother. In cases of favorable presentation,—occiput or breech,—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and the child will be expelled rapidly and safely without artificial assistance.

Ninth.—The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

Tenth.—Whenever it is possible, dilutation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

Finally.—As cases of placenta prævia offer special dangers faom post-partum hemorrhages, septicæmia, etc., thc greatest care must be exercised in every detail of operation and nursing, to avoid conveying septic material to the system of the mother.

Absolute cleanliness, rather than chemical substitutes for that virtue, should be our constant companion in the practice of the obstetric art.

TREATMENT OF PAINFUL FISSURE OF THE ANUS WITHOUT OPERATION.

Mr. C. G. Wheelhouse employs the operation of "stretching" the sphincter ani is advocated, in preference to "cutting" the muscle. This treatment Mr. Wheelhouse recommends in fissure of the anus, because "we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning." I have hitherto treated these fissures without any operative interference at all, and with such success as to warrant a continuance of the method. The following case will illustrate it:

J. T., a coachman, aged fifty-six, had for eighteen months suffered such agonizing pain during defecation that an enforced habit of constipation was established. From time to time he relieved his bowels by enemata, first taking a large dose of laudanum to alleviate his sufferings. On examination with a speculum, I found a fissure, nearly an inch in length, with irregular edges and an indurated base. The sphincter was much hypertrophied, and contracted powerfully and spasmodically during the examination.

I ordered a full dose of castor oil, with some rhubarb for its secondary astringent action, forbidding the customary laudanum. When this had operated I had the bowels well washed out with an enema containing Condy's fluid. This done, I passed the speculum and painted the fissure with a solution of chloride of zinc (twenty grains to one

ounce); then introduced a piece of lint, smeared with boric ointment, the contraction of the sphincter keeping it in contact with the sore. The bowels were kept in check by pilula plumbi et opii. Liquid food only was allowed.

The subsequent treatment consisted in the use of a powder (powdered boric acid, half a dram; violet powder, one ounce), which was sprinkled freely on lint, and introduced into the anus to dry up any discharge, and the continued use of the boric ointment.

By these means the fissure was entirely healed in six days, and there has been no return of the symptoms.

I have always found one application of chloride of zinc enough; it usually causes some smarting and uneasiness, but nothing more effectively purifies the ulcer or stimulates the reparative process. The introduction of cocaine robs the operative procedure of one drawback, the necessity of taking an anesthetic; yet I may recommend a trial of this treatment, at least in the case of those who have an innate horror of any thing approaching "cutting"—*A. D. Macgregor, M.B., British Med. Journal.*

THE TREATMENT OF EPILEPSY WITH BORAX.

In the *Boston Medical and Surgical Journal*, February 10, 1886, Dr. Charles F. Folsom calls attention to the use of borax, and reports cases in which the use of borax, commencing with ten grains three times a day, and then increasing up to fifteen grains, finally to twenty grains three times a day, served to greatly reduce the number of convulsions, even although nearly all the other methods of treatment had proved unavailing. In other ways the improvement was also great; the attacks of *petit mal*, which formerly were almost incessant, occurring sometimes twenty in a single hour, are now very seldom the source of annoyance, while the general health is almost perfect. The only annoyance noticed was a dry scaly eruption, giving rise to a good deal of itching, but which disappeared after several weeks' use of arsenic internally, and oxide of zinc ointment with vaseline given externally. Aromatic tinctures given with the borax prevented the nausea which immediately followed its use when mixed with water alone. Borax cannot be claimed ever to cure absolutely cases of epilepsy in which the bromides have failed, but it nearly always will produce improvement in the general health, and will lessen the severity and frequency of the convulsions. Dr. Folsom especially recommends the alternate use of borax and bromides, particularly in cases which have been for a long time under the influence of bromides, and which are therefore in the wretched condition nearly always caused by prolonged use of these drugs. The first few doses of borax often produce diarrhea, which soon ceases. Eruption on the skin is readily controlled, and the tendency to nausea, flatulency, and indigestion is easily met by chloroform, tincture of cardamom, compound spirits of lavender, etc., given with the borax.

THE CURE OF ASTHMA.

In a recent communication to the *Medical Record*, Dr. Richard B. Faulkner, says: "I understand by the term asthma, the condition of spasm of the bronchial tubes of both lungs, with hyperæmia approaching or amounting to inflammation, accompanied by rales upon both inspiration and expiration, with great difficulty of breathing, and the term is applied to the paroxysm alone, which returns at regular or irregular periods. Disturbance of function or disease of structure of the pneumogastric nerve is always present.

To cure paroxysms, I originated a method of treatment nearly five years ago; and repeated observation has confirmed its great utility. When called to a case of asthma, with a camel's hair brush, I made a streak of Churchill's iodine over each pneumogastric nerve in its course in the neck, from the upper part of the thyroid cartilage to the upper borders of the clavicles. By counter-irritation thus applied, the capricious and abnormal exercise of nerve-force by the pulmonary filaments is controlled, and bronchial spasm promptly relinquished. Such is my original method—simple, certain, quick. Churchill's tincture is the best counter-irritant, because, first, it is convenient; second, its action is easily controlled; third, it does the work. To permanently cure the paroxysms, it is usually necessary to remove the underlying morbid condition upon which they depend or are associated.

DIARRHŒA AND FEEDING BOTTLES.

"Baby has the diarrhœa, doctor." "Do you nurse him?" "No, doctor, he takes the bottle." How frequently has this conversation taken place between doctor and mother.

One of the commonest causes of diarrhœa, nasty, persistent diarrhœa, that resists treatment, is the use of the bottle. Yet it should not be so; it is not a necessary accompaniment of the bottle.

But the majority of mothers are careless about keeping the bottle clean. Two bottles should be always in use. When one is emptied, it should be well washed in hot water, thoroughly rinsed, and allowed to stand full of warm water, into which a small piece of washing soda has been introduced, until required for use, when it should be again well rinsed.

Long nursing tubes are abominations, and form ready nests for the propagation of disease germs. We should employ the ordinary rubber nipple, without any tube, and, having several on hand, those not in actual use should be kept soaking in water and soda. If we have good milk, that has

not soured, and if we observe these simple precautions we will soon cure these obstinate diarrhœas without drugs.—*Medical and Surgical Reporter.*

INDUCTION OF PREMATURE LABOR.

Dr. T. Gaillard Thomas says: The method of inducing premature labor which I now invariably adopt is a very simple, and is at the same time a perfectly efficient, one. The patient is placed across the bed, with the buttocks resting near the edge, and under is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub on the floor. In this tub we put one or two gallons of water at a temperature of ninety-eight degrees Fahrenheit. The operator stands between the thighs of the patient, whose knees should be properly supported, and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes. In the course of ten minutes the os will be the size of a silver half dollar, and when dilation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put to bed, rhythmical uterine contractions soon follow, and the labor is completed in a few hours.

THE TREATMENT OF EPILEPSY.

M. Ball, professor at Clinic St. Anne, gives preference to the bromides of sodium and ammonium in the treatment of epilepsy in solution, and belladonna with oxide of zinc in pills. The mixture he employs is the following: Bromide of sodium and bromide of ammonium, ʒ iss; water, ʒ x. Four tablespoonfuls a day in an infusion of valerian, and a pill night and morning, composed of ext. of belladonna and oxide of zinc, 15 grains, divided into 40 pills. He considers the bromide of potassium inferior to the other bromides, which are much more easily supported, and do not produce the loss of memory and weakness of the intellect attributed to a continued use of the potassium. However, in the cases of phthisical patients the bromides of sodium and ammonium are not well borne.—*Medical Press.*

NUX VOMICA IN PROLAPSUS ANI.

M. Schwartz has employed, during the last ten years, with good result, extract of nux vomica to combat procedentia of the rectum, not only in children, but also in adults, and even in those cases in which, from neglect and want of care, the ease has become chronic. He dissolves one or two grains in a glass of distilled water, and gives seven to ten drops every four hours, and he asserts that the prolapse disappears in twenty-four hours. For children, as a rule, the dose is five drops, and for children one or two years of age, only two or three drops. To prevent relapse the nux vomica should be given for eight days after the cure, two doses being administered daily. If the prolapse be of long standing and do not at first yield to the nux vomica, one drachm of extract of krameria should be added. The nux vomica overcomes the paralysis of the intestine, and the astringent krameria controls the diarrhœa which the relaxation of the intestine provokes.—*El Dictamen.*

A LINIMENT FOR EARACHE.

Pavesi recommends a liniment composed of camphorated chloral 2½ parts, pure glycerine 16-½ parts, and oil of sweet almonds 10 parts. This is to be well mixed and preserved in a hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

A PAINLESS METHOD OF INTRODUCING THE CATHETER.

The plan suggested by Dr. J. H. Berst, in the *Therapeutic Gazette* is the spurting of a few drops of a four per cent. solution of cocaine mur. into the mouth of the urethra, and allowing it to seek the deeper parts of the canal by gravitation. This can be accomplished with an ordinary medicine dropper, the point of which has previously been glazed by holding in the flame of a spirit lamp.

By this simple method of producing local anæsthesia the writer has been enabled not only to painlessly cauterize his patients, but in four cases perform internal urethrotory, and carry out the after treatment, viz., the daily introduction of a full size sound, without causing any pain whatever.

TREATMENT OF SCABIES.

Dr. Comessati says (*Pharm. Zeitung*) that the following is an easy, effective method of treating the disease: In a liter of water 200 grams of hyposulphite of sodium are dissolved. The entire body is thoroughly washed in this lotion, at bedtime. The next morning the body is washed in a solution of 50 grams of muriatic acid to the liter of water. By this means sulphur in a very finely divided state is deposited in the pores of the skin; sulphurous acid and chloride of sodium are also formed. These products are destructive to the parasite. The great advantage that the author has found in the use of this treatment is that it need not be repeated.

THE CANADA MEDICAL RECORD
A Monthly Journal of Medicine and Surgery.
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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, *Post Office, Montreal.*

MONTREAL JUNE, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

We hope to see a large attendance at the Tri-Annual Meeting of the College in Montreal on the 14th July. Perhaps it will be the most important session which the College has had for many years, as the question of a Central Examining Board, and an alteration in the method of electing the Governors comes up for discussion and decision.

In our last issue we intimated that we were in favor of both these changes being made. Indeed a new departure is necessary in electing Governors. or the College will never obtain the support of the mass of the profession, who now give it little or no sympathy and grudgingly pay their annual assessment of two dollars. Our article on this sub ject in the May number of the *Record* has called forth several letters from subscribers, the most important of which comes from a well-known and distinguished physician in the Eastern Townships, He says:

"I have just been reading your editorial in the May No. of your Journal anent the changes contemplated by the College of P. and S., Quebec. Do not for one moment fancy I have any ambition to gratify in the matter. I have none whatever. But I have had thirty long years of experience in affairs appertaining to our profession, and should know something whereof I speak. You state that the Profession as a whole in this Province take but little interest in the transactions of the College. Do you wish me to suggest a very simple remedy? Bring the constituencies in the first place into more satisfactorily-defined limits, ignore entirely the old and antiquated divisions in use, and take the modern ones, *i. e.*, those adopted at the time of the passing what was called the Judicial Dicentralization Act. This every one of ordinary intelligence understands. Although originally intended for judicial purposes, it was later made the basis of representation in the Senate at Ottawa and also in the Legislative Council of this Province. I might go still further, but it is not necessary—you see, we know each other fairly well, either personally or by reputation—in each of these divisions, and it brings home to every one of us a personal interest in the election, and without which things will go on in the future as they have in the past. Now this point I perceive you mention in your editorial, but you do not seem to think it of the importance that I do.—Fancy any *other* election to take place on any other than the well-defined basis at present in use, and you will soon see much of the interest and zeal in that cause disappear. There will be healthy rivalries and local pride excited, that will never, in my humble opinion, be created if you persist in the present unnatural divisions; dues will be more promptly paid (in order perhaps to secure a vote), and local feeling and interest aroused which cannot but result in the general good of the profession. This of course must exclude the possibility of electing or nominating any candidate not actually a resident of the District at the time of the election.—I do not know the number of Governors now allowed by the Act, but I believe there are *nineteen* judicial districts in this Province. If I am correct, surely that number would not be too great, even with the augmentation you refer to from the Colleges."

"Let me just say, in conclusion, that I think there are very few people living about here, whether medical men or not, who know the limits or extent of our own district. That I *do not* is most certainly true. I am a native of this place, and expected to vote intelligently for the district in which I have always lived, and yet cannot tell you whether or not the man I might favor lives within this jurisdiction. But I *do* know the borders or boundaries of this district. I am led to make these remarks because I notice there is a clause in the proposed changes which bears upon the point. Unless things are better defined in these respects, you will readily see no general professional interest in college matters can be awakened. And I quite agree with you that it is high time that the entire membership should feel that individual concern in the College which its importance deserves."

"Do not misunderstand me—what I feel of *vital* importance is to so change the rules as to admit of *one* Governor being elected from each judicial district in the Province, whether rural or city, and

that the candidate (or candidates) for such district shall be a "bona fide" resident of the district he aspires to represent—without this it will be only representation in name."

One point in the report of the Committee which we fear will give rise to an acrimonious discussion is that which incidentally refers to the advisability of giving the College a permanent resting-place, thus causing it to cease its annual visitations to the good city of Quebec, for if such a decision be come to, Montreal must of course be its location. In the interest of the College it is best that it should have a local habitation, and that locality which furnishes the majority of its business should be the place of its abode. Montreal gives to the College of Physicians and Surgeons over eighty per cent. of its business. This is a fact to which we direct particular attention. We are satisfied that if sectional feeling be put aside, and the question judged upon its merits, no difficulty will be found in endorsing the recommendation of the Committee. We trust this will be done; if it is even those in middle life may look forward with a fair degree of probability to seeing the College housed in a building of its own, and a Library founded which in time will be a boon to the profession of the Province.

TORONTO MEDICAL SOCIETY—The following have been elected officers of the Toronto Medical Society for the ensuing year: President, Dr. McPhedran; 1st and 2nd Vice-Presidents, Drs. Nevitt and Machell; Recording Secretary, Dr. Peters; Corresponding Secretary, Dr. Cochrane; Treasurer, Dr. Spencer; Council, Drs. Atherton, Graham, and Reeve.

CANADIAN MEDICAL ASSOCIATION.

The Nineteenth Annual Meeting of the Canada Medical Association will be held in Quebec on the 18th and 19th of August next. Arrangements have been made with the Railroad and Steamboat Companies, whereby each Member or Delegate may secure return tickets for himself and wife and a patient, at the rate of a fare and a third each. The necessary certificates entitling Members to this reduced rate will be issued by the Secretary on application. Intending readers of Papers are requested to notify the Secretary of the fact, giving the title of the Paper to be read, at their earliest convenience, in order to facilitate the arranging of the Programme of the Meeting.

THE ONTARIO MEDICAL ASSOCIATION.

The *Canada Lancet* says:

The last meeting of this Association, held in Toronto, June 2nd and 3rd, was in every respect a success. The number of well-known gentlemen taking part in it; the character of the papers and discussions, and the friendly spirit evinced by all, will make it remembered as a time of profit and pleasure to all who were present. Not the least pleasant feature was the presence of some American medical brethren. We are sure they were heartily welcomed, and it is to be hoped that that spirit of mutual acknowledgment of merit between members of the profession of the two countries may continue, and lead to more frequent interchange of thought at our meetings. Especially refreshing and encouraging was the presence of the veteran President of the New York State Medical Society, Dr. Moore, of Rochester. All who listened to the clear, incisive sentences, delivered with the force of full conviction of the truth of what he uttered, must have felt that they were in the presence of a mind matured by years of study and close observation. The address of the President was a valuable one, and was well received. It is to be regretted that more opportunity was not given for discussion on the cases presented by Drs. Gibson and Yonkers. Such cavalier treatment will not encourage members to undertake the trouble and expense of bringing patients to the association meetings, for no one would be warranted in asking patients to spend their time and money in presenting themselves were there not some hope of an elucidation of their cases by a general discussion. It is to be regretted that the report of the Committee on Ethics was tabled, owing to some irregularity. It will however be taken up early at the next meeting. Toronto is again chosen as the next place of meeting, which, considering its central position, and the better accommodation which may be obtained will be of advantage to the Association. Dr. Henderson's notice of motion for the appointment of a Defence Union Committee is, we think, timely; and we trust that such steps may be taken at the next meeting as will give adequate defence to practitioners proceeded against for malpractice. The election of Dr. Richardson, as President, is a matter of congratulation to the Society. His popularity and well-known zeal in the prosecution of scientific medicine and surgery make him a most acceptable officer. We anticipate for the next meeting of the Association a greater measure of success even than has heretofore attended its proceedings.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, JULY, 1886. No. 10.

CONTENTS.

ORIGINAL COMMUNICATIONS.
Clinical Lecture..... 553
SOCIETY PROCEEDINGS.
Medico-Chirurgical Society of Montreal..... 555
CORRESPONDENCE.
Our London Letter..... 562
PROGRESS OF SCIENCE.
Drundard's Epilepsy..... 564
On the Treatment of Painful Menstuation and Sterility from Flexion. 566
To arrest Nasal Hemorrhage..... 572
Cold Bandaging of the Leg in Isomnia..... 572
Hydrastis Canadensis in Metrorrhagia..... 572
Safe, Simple and Effective Mode of Treating Prolapse of the Rectum and Hemorrhoidal Tumors..... 573
Dermatology..... 574
EDITORIAL.
College of Physicians and Surgeons of the Province of Quebec..... 572
Canada Medical Association..... 574
New York Medical Monthly..... 574
Wyeth's Liquid Malt..... 574
Philadelphia Medical Items..... 575
Correspondence..... 575
New Application of Iodoform..... 576

Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, March 2nd, 1886.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

(Dean of and Professor of the Theory and Practice of Medicine in the Faculty of Medicine, Bishop's College.

CATARRHAL JAUNDICE.

GENTLEMEN,—The patient now before you is 35 years of age, and is a domestic. She has, as a general rule, enjoyed good health, although occasionally she has noticed evidence of gastric trouble, which she has observed was connected in some degree with changes in the weather. She has considerable washing of clothes, and has to place them on the line in the yard,—I was going to say, for the purpose of drying, while in truth it is to freeze. About two weeks ago, while engaged in this occupation, and the temperature was very cold, having just left a heated kitchen, she felt chilled, and was obliged to desist. She took a drink of warm ginger tea, and felt better, continuing her work for the day. On the following morning, although she resumed her duties in the household, she was feverish and uncomfortable, and as her bowels were somewhat confined she took a purgative, which only acted fairly well. Next day she felt still more uncomfortable, having a decidedly bad taste in her mouth, and, as she noticed the conjunctiva becoming yellow, she came to the Out-door Clinic. This was last Thursday, the 25th inst. Her condition was at that time in brief as follows: eyes, face and body of a decidedly lemon color, frontal headache, foul tongue, pulse of 64, and small, and bowels constipated. Her last motion was sticky, pale and very offensive. The diagnosis was catarrh of the bile ducts or catarrhal jaundice. This is a disease of somewhat common occurrence in Canada, owing to the changeful character of our temperature, especially in Autumn, when we have warm days and cool nights. It is also met with somewhat frequently in the malarial districts of the western portion of our neighboring province. It, as a rule, is not a primary disease,—I mean by this statement that the catarrhal condition does not first attack the mucous membrane which lines the bile ducts. As a rule, there has existed for one or more days evidence of a catarrhal congestion in the gastro-intestinal canal, but more especially in the duodenum, that portion of the intestinal canal which is immediately next the stomach, and into which the bile ducts empty. The disease, as a rule, then, generally extends from the duodenum up the ducts. The initial lesion is a congestion or hyperæmia of the mucous membrane, which becomes swollen, and coated with a tenacious mucus. In this way the canal becomes partially obstructed, in some cases wholly obstructed, so that little or no bile passes into the gut. In about four or five days the congestion begins to disappear, while at the same time a good deal of debris is cast off. This debris blocks up the canal for a short time, but it gradually liquifies, escapes into the duodenum, and once more the duct is clear. The symptoms of this disease, in addition to those which I have named as being present in the case now before you, are a sensation of weight and sore-

ness in the right hypochondrium,—actual pain may exist, but is rare. The spirits are much depressed, and the patient is apt to become melancholy. In fact, the patient feels far more sick than his actual condition, as illustrated by general symptoms, would seem to warrant. The staining of the eyes and skin is noticed about the fifth day, sometimes earlier. Heart's action weak, and is slow and labored. The urine is the color of porter or dark coffee, owing to the quantity of bile, which is being excreted through the kidneys. It also contains the urates in great amount. The urine will stain yellow any linen with which it may come in contact. The coloration of the skin is due to the presence of bile pigment in the transuded liquid, which infiltrates the tissues. Sometimes even the perspiration gives a yellow stain to clothing, especially the perspiration from the axilla. The depressed condition of the circulation is due to the action of the biliary salts on the heart itself. If you will remember the physiological action of bile on the food which it meets on entering the duodenum you will at once understand how certain articles of diet, such as the fats, for instance, pass on, improperly prepared for further action in other portions of the intestinal canal. If you remember the fact that bile possesses strong antiseptic power you will understand how its absence allows the food in the gut to decompose, the result being the formation of a large quantity of abominably fetid gas. This causes much flatulence. The absence of bile causes the stools to be light clay or chalk color—they are pasty, and it often requires much straining to empty the rectum. The skin is itchy, sometimes excessively so—now and then it prevents sleep. In severe cases, when the bile-staining of the skin is very deep, vision is yellow, from the quantity in the humors of the eye. In about 10 days from the first symptoms matters begin to mend, the feverish condition passes away, the tongue cleans and the appetite returns—still the skin continues markedly yellow and the bowels remain constipated. About the fifteenth day the evacuations from the bowel first show evidence that bile is resuming its natural channel by being darker. In a couple of days the normal in this respect is reached—when the fetid odor and flatulence become memories of the past. The skin discoloration is the last evidence of the disease which disappears. Until this takes place there continues to be evidence of bile in the urine.

Generally these cases make a complete recovery, but occasionally you meet with one which, from some cause which you are not able to explain, does not. The jaundice then becomes chronic and there occurs serious organic changes in the liver.

The treatment in the case now before you was very simple. It consisted of the local application of hot linseed poultices over the right hypochondrium, with the internal administration of half drachm doses every four hours of phosphate of sodium. This remedy is in much favor with American physicians. She also got two doses—one night and morning—of Grey powder, *i.e.*, Hydrarg cum cretæ with rhubarb. In this disease mercury is often very useful, not as a purgative or an hepatic stimulant, but for the purpose of allaying the great irritability of the mucous membrane. For this purpose calomel is the best preparation, and should be given in doses of $\frac{1}{16}$ to $\frac{1}{12}$ of a grain. Saline waters, as the Carlsbad, Vichy, Saratoga, and our own Canadian waters—Plantagenet and St. Leon, will be found excellent, with a view of keeping up free elimination from the kidneys. Bitartrate of potash lemonade may be freely used. Two grains of euonymin and four grains iridin given at night, and followed by a saline in the morning, has recently given excellent results. Attention to diet is requisite, as an excess in eating and drinking sometimes produces it. All fatty, starchy and saccharine substances must be omitted, for they require bile either for solution or absorption or to prevent decomposition. Milk, with lime water, especially skimmed milk, makes excellent diet. Conium is also said to be used by some physicians with success

Those who saw this patient when she was here last week will of course recognize a considerable improvement: her eyes are brighter, her heaviness is gone, and the discoloration of the skin is showing marked signs of a rapid disappearance. Her bowels are more readily moved, and in their color there is an improvement. The case has not been a severe one, but it has given me an opportunity of saying a few words on a disease which, when you have commenced practice, will not unfrequently claim your attention.

DRUNKARD'S EPILEPSY.—In view of Magnin's assertion that in France the frequent cases of epilepsy occurring in drunkards are due, not to alcohol, but to absinthe, MOELI has reviewed the German statistics of the subject, which may be thus summarized:

In Germany 36 to 40 per cent. of the subjects of delirium tremens are also victims of epileptic attacks. An attempt to determine whether the occurrence of such attacks was correlated with the abuse of any special kind of distilled liquor was unsuccessful, but it was found that in twenty-six almost exclusively beer and wine drunkards, only one was peileptic.—*Centralblatt fur klin. Med.* No. 11, 1886.

Meetings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 2nd, 1886.

GEO. WILKINS, M.D., 2ND VICE-PRESIDENT, IN THE CHAIR.

Primary Cancer of Pancreas, with secondary deposits in other organs.—DR. ROWELL exhibited the specimen, and DR. ARMSTRONG related the clinical history of the case:

Mrs. M., aged 80, widow, enjoyed good health until three years ago. Father and two brothers are said to have died of cancer. Admitted to Western Hospital in December, 1885, suffering from loss of appetite, pain after eating, and vomiting. On examination, a hard, round, circumscribed lump, about the size of an orange, was found occupying the epigastrium, just over the region of the pyloric end of the stomach. As little was to be gained from medical treatment, a mixture containing bismuth, hydrocyanic acid and mucilage was prescribed, and she was removed by her friends to her home. It was learned at the time of her death that since her removal from the hospital the vomiting had continued persistently, the most bland liquids, even water, being immediately regurgitated. She had also suffered much pain, for which she had taken morphia pills. Nothing passed bowels for two weeks before death, and she became distinctly jaundiced. At the post-mortem examination, 36 hours after death, only the abdominal cavity was examined. On opening the abdomen, the omentum was found adherent to the anterior abdominal wall. Liver very much enlarged, extending down to level of umbilicus, and containing several large cancerous nodules. Gall-bladder much distended, containing eight ounces of bile and a dark-colored gall stone the size of a cherry. Upon raising the liver, the head of the pancreas was found to be occupied by a cancerous mass, and the surrounding tissues were infiltrated and adherent to it. The walls of the stomach were free from disease. Complete obstruction of the duodenum occurred four inches from the pylorus, caused by pressure of this cancerous mass, together with the adherent and infiltrated tissues about it. A number of the mesenteric glands were also involved. Intestines empty. Spleen slightly enlarged.

New Method for the Relief of Ruptured Perineum.—DR. TRENHOLME read a paper on this subject exhibiting drawings of the new method as follows:—This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts, binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever-lamented Dr. Sims introduced his silver suture. The operations of Baker Brown and others were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city, and, I might say, of this country, endeavored to dissuade a confrere from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patient cured. This, occurring in our good city, speaks volumes. For my own part, I think the evils resulting from severe lacerations are very great, and if anything I may say will direct more attention to the prevention of these evils, I will be satisfied. I feel confident that the sum-total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and round ligaments share in the same mischief. It is a fruitful cause of retro-luxations of the uterus and prolapsus of bladder. Of all the marital misery and personal distress I need say nothing; these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well-known preparation of the patient required, especially in extensive lacerations; you all know as to this and the after-treatment also. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable,

and the restoration of this body is *the one* object of perineoraphy. An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained—without it the natural support of the pelvic viscera is impossible. Not only is there apt to be hernia of the anterior rectal wall, but prolapsus of both bladder and uterus—and this in the order I have given them. The best success heretofore has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together are based upon a right conception of the anatomy of the parts. The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil, each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place, the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded —*i.e.*, the cicatricial surface in one piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface—(the dotted line in sketch No. 1 shows this); the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap; this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the shield-sutures (and here I would say a word in favor of the catgut suture which I adopt.) It is by far the best, as it gives the greatest possible extent of surface to surface—much greater than can be secured by the interrupted or any other suture. Two deep sutures usually suffice, and these—whether silver, silk, or catgut—are passed in and secured by clamp shot upon an ivory shield. The first suture should be inserted low down, and about three-quarters of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear, and brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up. The last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, and the upper part of the flap and around on the right and left side are secured by catgut sutures; this leaves the united surfaces in the shape of the letter T. The vaginal surface is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by first intention. There is very little pain, inasmuch as the deep shield-suture allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum the flaps are carefully brought together by a running catgut suture, and the operation completed as in this case. The objection to all other operations was that it left the vaginal incision open, which sometimes, therefore, interfered with union by first intention. By my method this is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained: Perfect union, perfect restoration of the perineum, no loss of substance, and no after-fever worthy of the name. Sketch 3 shows the condition of the parts at the completion of the operation.

Dr. WM. GARDNER said that, as a rule, extensive lacerations of the perineum were mischievous and produced symptoms, yet he had seen many exceptions to this. In numbers of cases, even where some fibres of the rectum have been torn, no inconvenience followed, due, no doubt, to the integrity of the vaginal walls and to individual peculiarity. He had also seen procedentia uteri in virgins and in multiparous women, where there was no rupture at all. The principle of the method advocated by Dr. Trenholme was not new. Hart and Barber had described a similar operation, but denuding in two segments; and Tait, five or six years ago, proposed an operation similar to Dr. T.'s, with the exception of introducing the sutures somewhat differently. Dr. Gardner had performed this (Tait's) operation twice, but was not favorably impressed with it. Convalescence was not so satisfactory as when he had performed Emmet's operation.

Dr. ARMSTRONG thought that the different degrees of injury resulting from laceration of the perineum in different cases depended upon the charaeter and extent of the tear. He doubted

whether a simple tear of the so-called perineal body which consisted principally of cellular tissue and skin, was followed by much harm. There was good evidence to the contrary. The evil results charged to laceration of the perineum only obtained when either the pelvic fascia was torn or when the muscular floor of the pelvis was injured, either by a separation of the levator ani muscles in the middle line, or when one or both of these muscles were torn away from their origin from the rami of the pubes or from the ischial spine. This fact is pretty clearly established by Emmet, by Dr. Schatz of Rostock, and by Dr. B. E. Hadia of San Antonio, Texas. The best operation is that which the most perfectly restores the parts to the condition in which they were before the injury was sustained. Emmet's new operation has yielded good results in the Western Hospital. He was not aware that, so far, any attempt had been made to unite the divided muscles in the median line or to the pelvic fascia.

Lanolin.—Dr. REED made a few remarks on this drug, a new basis for ointments, introduced by O. Liebreich, obtained from the fat of the keratin tissues and principally from wool. The very strong recommendations of this cholesterine fat in the articles in the *British Medical Journal* for February would cause it to be extensively tried by the profession. The advantages of rapid absorption and ready miscibility with aqueous mixtures were in a measure confirmed. Manufactures were preparing for a great demand, and an abundant supply at a moderate price would soon be on the market. A specimen was passed round.

Operation for Intra-uterine Fibroid—Accidental Inversion of the uterus and rupture of the Perineum.—Dr. GARDNER reported the case as follows: Mrs.——, childless, was sent to him from Ontario. She had had severe hemorrhages for the past five years; of late they have been very excessive, and produced great blanching. On examination, a tumor was found about the size of a child's head and completely filling the vagina and uterus. *Operation*—The tumor was fixed by an assistant and removed piece by piece by means of scissors, fingers and serrated scoop. Towards the end of the operation, whilst dragging strongly on the remaining portion of the tumor it suddenly gave way, tearing the perineum and inverting the uterus. The uterus was easily replaced, but sutures were not applied to perineum in order to facilitate irrigation and drainage of the uterus. For this purpose Dr. Gardner always employs the double tubes fixed to the cervix. Convalescence proceeded very satisfactorily for five days, when the temperature rose and diarrhœa set in. This condition persists in spite of treatment. It is feared she has amyloid disease of the liver and other organs, the liver being now enlarged and smooth. She is also passing large quantities of urine containing albumen.*

Stated Meeting, May 1st, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Tuberculosis of the Tongue.—Dr. STEWART exhibited a woman, aged 28 years, who has been complaining for over four months of cough, purulent expectoration, night sweats, loss of flesh, etc. She has lost a brother and sister from pulmonary consumption. Her father and mother are still living, and enjoying good health. When she first came under observation, three months ago, there was distinct evidence of consolidation of both apices. This condition still continues. The patient is hoarse, and complains of pain in the larynx and also in the throat when swallowing. Dr. Major, who kindly examined the larynx, found a tuberculous nodule about the size of a grain of wheat in the inter-arytenoid space. The tip of the tongue is superficially ulcerated to the extent of about a five cent piece. From the centre of this ulcerated surface a fissure extends into the substance of the tongue to the depth of about a quarter of an inch. The tissues immediately surrounding this fissure are hard and nodular. There is no pain on pressure, however, neither is there any discharge from the ulcerated surface of the tongue. Shortly after the sore on the tongue was noticed, the patient experienced a severe pain in it, which continued to increase in severity up to the time when she first came under treatment, when it had reached such an exquisite degree that she found it almost impossible to eat or even to speak. The local application of iodoform quickly relieved the pain, but otherwise it does not seem to have had any influence over the course of the local trouble. Lately, a half per cent. solution of papayotin in equal parts of glycerine and water has been applied several times daily, the object being to directly influence the tuberculous infiltration, from the well-known properties that this drug has in dissolving albuminous tissues. The case is un-

* She died a week later from pleuro-pneumonia.

doubtedly one of a typical tuberculous ulcer of the tongue. Although the secretion from the ulcer has been examined on two occasions, no bacilli have been found.

In reply to a question raised by DR. SHEPHERD as to the influence of iodoform, when used as a local application, in producing pneumonia,

Dr. MAJOR stated that he had used the drug extensively in nasal and laryngeal disease for many years, and he had not, thus far, encountered any untoward result.

Dr. R. J. B. HOWARD has seen iodoform freely used in Vienna in cases of excision of the tongue, and there it is said to be free from danger.

Eversion of the Laryngeal Ventricles.—Dr. MAJOR presented a case of eversion of both laryngeal ventricles in a male aged 27. The case had been under observation and treatment for over two years, and showed decided improvement. A tuberculous condition was present, as evidenced by lung signs and a local development in the post-laryngeal wall. He referred to a case of complete eversion of the right sacculus, which had been demonstrated at the throat clinic of the Montreal General Hospital in April, 1884, occurring in the person of a syphilitic subject, where the ventricle was completely returned under treatment. Reviewing the literature of the subject, allusion was made to the fact that in the majority of the few recorded cases some dyscrasia was prominent, notably accompanying syphilitic, tuberculous or cancerous disease.

Peculiar Skin Disease of the Feet.—Dr. R. J. B. HOWARD exhibited a boy, 12 years of age, of healthy family. He has angular curvature, involving the lower dorsal region. First noticed when he was 3½ years old. His feet were first affected in his sixth year. A small "scurfy" spot appeared first on the right foot, and has spread steadily, healing at the centre. When he came to the Dispensary it appeared as a lupiginous patch about 4 inches across, on the right ankle and instep; smaller similar patches existed on the outside of the right little toe and left great toe, at metatarso-phalangeal joint. The patch is covered with a crust or scab of a somewhat papillary appearance. Not tender or painful at any time, and never ulcerated. Dr. Howard brought the case for diagnosis. He thought it was due to some derangement of the spinal cord at the seat of the curvature, as nerves from this region supplied the skin of the feet.

Dr. SHEPHERD believed it to be a form of lupus.

The PRESIDENT suggested that the parts be poulticed to remove the crust, and the boy be again brought to the Society.

Compound Fracture of both Legs.—Dr. SHEPHERD presented a case with the following history:—Edward N., aged 33, sailor, on the 11th of September, 1885, whilst working on his ship, fell through the hatchway into the hold, a distance of twenty feet, breaking both his legs. He was immediately admitted to hospital, and on examination, it was found that he had sustained a compound fracture of both legs about their middle third. The wound in left leg was about two inches long, and the fracture was comminuted. The right leg had the soft tissues much lacerated, the wounds being multiple, the largest some 4 inches long. Large pieces of muscle protruded, and there was much riding of bones. After cleansing the wounds with bichloride solution 1–1000, dusting them over freely with iodoform, and covering them with iodoform gauze and sublimate jute, the left leg was immediately put up in plaster, a window being left opposite the wound, some jute being placed over this and kept in place with a gauze bandage. Owing to the size of the wound and amount of the laceration in the right leg, it was thought wiser to put it up in a McIntyre splint, after placing the bones in as good a position as possible. The same evening, owing to the large amount of oozing, the external dressings were renewed, but were not again touched for one month, at the end of which time the wounds were found perfectly healed; the fracture of the left leg was firmly united, but although the extensive wound in right leg had healed, there was no union, so, after rubbing the bones together, it was put up firmly in a plaster-of-paris bandage. From time to time this bandage was renewed, the patient being allowed to move about with crutches. At the present time, seven months after the accident, the patient could walk about without support, and during the next week intended joining his ship. The right leg was still encased in plaster, and although the union was not quite perfect, it was daily improving. There was one inch and a half shortening of the right leg. After exhibiting the patient, Dr. Shepherd remarked that he had now no fear of compound fractures, and that all the cases did well if the wound was thoroughly cleansed

with bichloride, dressed with iodoform and jute dressing, and left undisturbed. Of course, if the temperature rose, it was wise to examine and change the dressing. He considered this a case which a few years ago would have demanded amputation.

Dr. R. J. B. HOWARD said that Esmarch reported a case where there were three compound fractures of the leg, thigh, and forearm. The treatment used was similar to Dr. Shepherd's and a good recovery followed.

Dr. JOHNSTON exhibited the following pathological specimens:

1. *The Cord and Brain* from a case of non-tubercular cerebro-spinal meningitis in a child. Patient was suddenly seized with severe pain in the head and vomiting. A few days before death ecchymotic spots appeared over the chest and arms. The illness only lasted a week.

2. *The Uterus and Heart* from a case of malignant endocarditis in a patient suffering from puerperal fever. Patient did well for the first twelve days after confinement, when she was suddenly seized with rigors, her temperature running up to 105°. Nothing local was found to account for this. There was no pain in the abdomen. The heart showed endocarditis, with vegetations over the valves. The uterus showed signs of septic endometritis. There was also a diphtheritic-looking membrane in the cervix and on the inner sides of the labia. There were infarcts in the kidneys and spleen, but no pyæmic abscesses.

Dr. J. C. CAMERON read a paper entitled

Notes on the Determination and Causation of Sex.

By P. W. P. MATTHEWS, LL.D., M.R.C.S.E., Etc.,

Dominion Coroner for the North-West Territories and Medical Officer of the Hudson Bay Company, etc.

of which the following is an abstract:—

From earliest times, men have been anxious to learn the sex of the fœtus in utero, and for this purpose many quaint methods have been devised. The following aphorisms enunciated by Hippocrates are to this day believed and practised by midwives in the East:

1. If the child be a male the mother will have a good color; but if a female, a bad color.

2. The male fœtus is usually seated on the right side, the female on the left.

The ancient astrologers directed a drop or two of the mother's milk to be squeezed out upon a clean knife or glass, or upon the finger-nail. If the milk spreads about, the child is a female; if it remains still the child is a male.

M. Venette, the author of a popular treatise in France, directed that if a son is desired the generative act should be performed when the wind is in the north. Others held that the right testicle secretes female sperm and the left male; others that the right ovary discharges male ovules and the left female, and directed the woman to lie on the right side during coitus if a male child is wanted. This belief still lingers among some of the Hudson Bay Indians.

Pythagoras thought that a vapor descended during coitus from the brain and nerves of the embryo, the grosser tissues being derived from the blood and humors found in the uterus.

Empedocles affirmed that a portion of the embryo was contained in the sperm and a portion in the germ, the child being formed by the union of the two.

Hippocrates taught that conception takes place in the uterus by the mixture of due proportions of the male and female elements, sex depending upon which is stronger.

Aristotle held that the material parts of the embryo are formed by the catamenial blood, and that the male semen imparts the principal of life when the body is formed.

In later times, Descartes and his followers affirmed that a sort of fermentation takes place when the male and female seminal fluids are mingled, a fœtus being the result; while, according to the chemical school, the acid male secretion mixing with the alkaline female secretion causes a sort of double decomposition, a fœtus being a precipitate.

In 1667, Ludwig Hamm contended that an immense number of animalcules exist in the semen of all male animals, which contain the perfect rudiments of the future animal, and that the female simply supplies the proper nidus or habitat and suitable nourishment. The discovery of movement in the minute seminal particles seemed to confirm this theory; while some writers went so far as to say that these animalcules are of different sexes and copulate so as to engender male and female offspring.

Thury of Geneva propounded the doctrine that in animals, males are always produced when completely matured ova are fecundated, and females when the ova are less mature. Thus by serving

the cow with the bull at the commencement of rut, a female calf is produced; by serving at the middle or end of the rut, a male is ensured. In further proof of his theory, he said that queen-bees always lay female eggs first, and males afterwards. Applying this theory to the human female, it has been argued that if the ovum which is discharged from the ovary at time of menstruation, is impregnated shortly after the conclusion of the menstrual period, a female will be the result; but if impregnation do not take place for ten days or a fortnight, the child will be a male. This rule has been briefly formulated thus: *Female* offspring result from *post-menstrual*, *male* from *præmenstrual* impregnation.

The relative age of the parents seems to have some influence upon the sex of their offspring. Mr. Sadler, from an investigation of nearly 15,000 cases, concludes that on an average the sex of the child is that of the parent whose age is in excess, In England the husband is usually older than the wife, and the proportion of live-births is 104.7 males to 100 females. Among illegitimate children, the proportion of males is somewhat higher, 106.3 to 100, probably for similar reasons.

Recently, Mr. Starkweather has published a book on the "Determination and Causation of Sex in Man and the Lower Animals," in which he lays down the law that sex is determined by the *superior* parent. In deciding this superiority, numerous factors are to be taken into account, such as temperament, activity, energy, will, intellect, features, color, physique, health and nutrition. This sexual superiority does not necessarily coincide with superiority as generally understood, nor does it necessarily imply superiority in mental and moral qualities. This theory is an expansion and extension of Hippocrates' dictum, that the parent who is physically more vigorous at the time of conception gives his or her sex to the offspring; or, as Cuvier puts it, "To obtain an excess of female offspring, the father should be young and ill-fed, and the mother of mature years and highly fed."

In 1863, Frankenhauser and others propounded the theory that the rapidity of the fœtal heart varies according to the sex of the child, being greater in the female than the male. In 50 cases he succeeded in diagnosing the sex correctly, finding:

124 = mean male fœtal heart-beat.
144 = " female " "

Steinbach followed with 45 successful cases out of 57, finding:

131 = mean male fœtal heart-beat.
141 = " female " "

Devilliers in France and Cumming in Edinburgh denied the truth of this theory, and maintained that the frequency of the fœtal heart-beat depends upon the size and weight of the child rather than upon its sex. As it is usually slower in large and well-nourished children, and as males are generally larger and heavier than females, a slower pulse-rate in males is usually to be expected. Opinions seem to be contradictory respecting the truth of this theory; my own experience does not corroborate it. One strong argument against it is, that if the pulse-rate of a considerable number of children be taken within one hour after birth, the difference of rate in the sexes will be too slight to admit of any rule being deduced therefrom.

Remarks by Dr. Cameron:

In 1879-80-81 I made some observations which tend to confirm Frankenhauser's theory. McClintock, in the Sydenham Society's edition of Smellie's Midwifery, quotes some observations made by Dr. Frank C. Wilson of Louisville, which are so similar to my own that I tabulate them together as follows:—

	Dr. Wilson's Cases.				Dr. Cameron's Cases.			
Fœtal heart-beat.	No. Cases.	M.	F.	*Remarks.*	No. Cases.	M.	F.	*Remarks.*
110-125	37	35	2	Almost certainly male.....	15	15	0	
" 125-130	15	13	2	Probably "	14	14	0	
" 130-134	12	8	4	Doubtful-chances of "	7	2	5	
" 134-138	7	2	5	" " female..	15	5	10	
" 138-143	9	2	7	Probably " ..	19	3	16	
" 143-170	26	2	24	Almost certainly " ..	30	1	29	
	106	62	44		100	40	60	

The lowest fœtal heart-beat in my series was 98, in a very large male child. From this series of observations, it seems tolerably conclusive that a fœtal heart-beat under 130 is generally diagnostic of a male; over 140, a female. To secure accuracy, the following precautions should be taken:

1. Observations should be made before or in the very early stages of labor, for as labor advances the fœtal heart-beat tends to become more rapid or irregular.

2. Several observations should be made, and their mean calculated, for the painless contractions of the uterus frequently modify the fœtal heart-beat 10-20 per minute.

Many failures in diagnosis may be referred to lack of attention to these precautions.

In discussing this question of sex, much confusion has arisen from the want of clear notions respecting menstruation, ovulation and conception. Menstrual flow and the discharge of a mature ovum from a Graafian follicle are supposed to occur about the same time; hence many conclude that these two processes stand in the relation of cause and effect. Although the question is not yet definitely settled, evidence is rapidly accumulating to prove that their coincidence is accidental rather than necessary, and that one process may go on independently of the other. Indeed they are essentially opposite in character: ovulation is *progressive*, being the preparation and discharge of ova fit for impregnation; menstruation is *retrogressive*, being essentially a retrograde metamorphosis of the soft decidual nest prepared for a previous ovum. It has, therefore, been aptly called "the funeral obsequies of defunct and disappointed ova."

Physiologists tell us that after a ripe ovum has been expelled from its Graafian follicle, its germinal vesicle becomes nuclear and approaches the surface. A portion is eventually extruded from the egg in the form of the Polar Bodies, leaving the remainder to form the *female pronucleus*. The ovum then ceases to grow unless speedily fertilized, perishes, and is cast off. But if spermatozoa reach it in time and penetrate its substance, it does not perish; the heads of the spermatozoa detach themselves and become *male pronucleus*, which fuses with the female pronucleus to form the fertilized nucleus. Conception is said to have taken place and growth is thenceforth rapid. Morphologically the male and female pronuclei are closely allied, both being derived from the primitive ova of early embryonic life. In the female, a primitive ovum develops into a permanent ovum, capable of producing a human being; in the male, a primitive ovum breaks up into a number of spermatozoa. That the sex of offspring must be due to the relative properties and powers of these male and female pronuclei is tolerably clear, but to what properties or what powers is not quite evident. The essential points of Starkweather's theory are the following:

1. The male and female element share equally in the determination of sex.

2. Sex is determined by the superior potentiality of one or the other.

3. The superior parent or element (at the time of fruitful intercourse) determines the opposite sex in the offspring—crossheritage, as it has been called.

4. In the great majority of cases, it is possible to prognosticate the sex that will result from the union of certain parents.

5. The sex of offspring is or might be generally within the control of parents.

6. This law holds good for the lower animals as man.

He cites numerous life histories in support of his theory, such as Milton, Shakespeare and Sir Thomas More, and dwells upon the well-known fact that great men have usually great mothers. He holds that his theory accounts for the small excess of male births among western nations, the marked excess of females among mulattoes, and the temporary large excess of males after war, pestilence, etc. In certain families, too, there has been noticed a remarkable succession of sons in one generation, of daughters in the next, and of sons again in the next. These cases are explained as examples of crossheritage, the sex being determined by the superior opposites. In the controversy aroused by Starkweather's book, frequent appeals have been made to the experience of stock-breeders, both for and against his theory. On the whole, the evidence seems to be against the ability of man to control sex among the lower animals. Yorkshire men, the most experienced breeders in England, and probably in the whole world, have no confidence in their power of predetermining the sex of horses and cattle although it would be very much to their pecuniary advantage to be able to do so, but are confident that they can modify, develop, or eliminate any other physical quality to an almost unlimited extent.

Starkweather's theory is ingenious, and contains much truth, but is yet far from proven. As our knowledge and experience increase we may know more of nature's methods; but it is highly improbable that we will ever gain the power to regulate sex, for such power would be prejudicial to the best interests of the race. During countless ages, the diversity of man's environment, the unceasing struggle for existence, the survival of the fittest, and the gradual development of the race have continually, through barbarism and civilization alike, determined those laws of reproduction which were from time to time most conducive to man's welfare. Nature's experience is greater than ours; her wisdom, patience and unselfishness are greater than ours; her balance more justly equipoised than ours. But, though we cannot supplant her, we may learn important lessons by observing her methods. The careful study of sex-formation should throw much light upon the mysteries of heredity, and enable us to foresee, and possibly fore stall, many family taints or predispositions. The knowledge that a grandfather's peculiarities are liable to be propagated through his daughters to his grandsons should help us to grapple with such diseases as dipsomania, hæmophilia, or gout.

If, in any degree, it be true that the superiority of the parent is a powerful factor in determining the sex as well as the strength of the offspring, it must be equally true that the deterioration of the parent will cause deficiency or deterioration of the opposite sex in the succeeding generations. If, then, the modern craze for the "higher education of *women*" goes on unchecked till their physical powers are sacrificed to so-called mental culture, the prospects for coming generations of *men* will be dark indeed, and Miltons or Shakespeares will be well-nigh impossible. But nature's unerring balance eventually rights all things; the enfeebled progeny of weak, neurotic parents inevitably succumb before the vigorous offspring of the healthy and robust, for the fittest must survive.

Correspondence.

OUR LONDON LETTER.

The central attraction for the medical man visiting London is her hospitals and medical museums. Whether they "do these things better in Vienna," as the Teutonophilist says they do, remains to be seen; but there can be no question about the great advantages here open to the student who will avail himself of them. The endless amount of material that comes to hand in the various general and special hospitals makes it possible to study all diseases in all shapes.

I have noticed that very few students or attachés of one hospital know much about the service of other institutions, and you can accordingly easily understand how difficult it is for one having less than six weeks to devote to study here to acquire more than a superficial notion of the relative merits of the numerous teachers and clinics with which London is studded. However I shall give you my impressions, such as they are, with the assurance that the men and things whereof I speak were personally investigated.

I have been frequently told that in this city and its suburbs professional competition is very keen, and that the good old days of the guinea fee are going quickly by. Also, that in the lower stata of professional life private dispensaries where medicine and advice can be had all the way from a shilling to half a crown are not uncommon. In spite of these statements my intercourse with all sorts and conditions of practitioners here does not lead me to believe that life is any harder with them than in our colonial towns. I am certain of this, that they are a more *leisurely* class. Whether that be due to the phlegmatic style of doing things which everywhere contrasts with our nervous American routine I am unable to determine, but I am sure we have something to learn from our English brethren in this respect. Probably the first thing in respect of disease that strikes the stranger is the large proportion of rachitic, tubercular and scrofulous affections that one daily sees in the Out-patient Departments as well as in the wards of all the hospitals.

I am inclined to believe that syphilis is more frequent than we have it, and I am sure skin troubles are in greater variety, if not in greater proportion, than in Canada.

Barlow, of the great Ormond St. Hospital for children, stated the other day that of all *post-mortems* held there tubercle is found in the proportion of 60 per cent. We have not far to look for the causes of this state of things. London is one example of the rule that the poverty and misery of a city are in inverse proportion to its wealth. Bad and insufficient food, close unventilated houses, narrow streets, foul air,—all these combine to pro-

duce types of disease which—let us be thankful for it—have not as yet invaded our shores. Again the London climate, with its fogs and concentrated essences of all that is vile in the way of volatile organic odors must in certain seasons of the year be very inimical to the health of those whom necessity compels to live in the older parts of the city. If this be true, nothing also can be more admirable than the numerous plans adopted to cleanse and purify the by-ways and lanes of the town. The difficulties in the way of efficient drainage, ventilation and water-supply are enormous, and one continually wonders not that he occasionally encounters dirt and mal-odors but that in this endless collection of cities of all ages and all degrees of enlightenment called London he meets in with so little mal-hygiene. If you will pardon my want of arrangement in this straggling letter I wish to say something about children's hospitals. Besides mixed hospitals for women and children, and the great general hospitals that all admit children, there are at least eight special institutions where infants and children alone are treated. Of these probably the Evelina, in Southwark, where Drs. Goodhart and Taylor are the physicians and Messrs. Howse and Clement Lucas the surgeons, and the hospital for sick children in Gt. Ormond St., are the chief. In the latter clinics are given by Dr. Barlow, Mr. Howard Marsh and several others. Life in London bears heavily upon the children of the poor, and the pallid faces and warped bodies of the little patients suggest C. L. O. ferruginous tonics and good nursing as eloquently as the additional special treatment may be indicated by a closer examination. One sees Sayre's apparatus in nearly all the wards, but I think I am right in saying that it is *rarely* used for spinal curvature. Putting the child to bed for several months, tonics, good food, etc., are the indications. One of the teachers in the Great Ormond St. Hospital took the ground that, whatever else it might do in the way of keeping the child quiet, or of assisting to support the back, it did not succeed in keeping the diseased surfaces of the bones apart, and consequently failed to accomplish what was first claimed for it. The patience and quiet demeanor which are exhibited in crowded streets and entertainments by the English people are reflected in the manners of those who are obliged to take advantage of hospital treatment. There is very little argument or explanation or persuasion employed to induce a patient to undergo an operation or to follow this or that line of conduct. I have rarely seen an applicant do other than follow the precise direction of the physician or surgeon. It seems to me that, apart from the phlegmatic temperament of the average hospital patient, such a state of affairs speaks well for the profession, and indicates a confidence in its members which does not obtain everywhere.

The façades of nine-tenths of the London Hospital buildings proclaim the fact that they are "supported by voluntary contribution," and, with the exception of very old institutions like Guy's, St. Thomas' and St. Bartholomew's, which own large estates in various parts of the country, they all "are in want of funds" and some of them (Guy's, for instance) feel the pressure of diminished land values and have had to shut up some of their wards in consequence.

Although the Austrian and German system (where a patriarchal government furnishes the needful) is said to be superior to this, there is something more in keeping with the spirit of this, the best republic in the world, that the people should, from a sense of their inherent value, give directly to these charities.

It would be equally as impossible for me to describe within the limits of a few letters the internal management of each hospital as it would be to give you an idea of the abilities and teaching powers of the many eminent physicians and surgeons that attend them. However, if I say anything at all about the latter, I presume I am right in still regarding Sir Joseph Lister as *primus inter pares*. A kindly, almost diffident, old gentleman with a well cut good face, is he. He is still a regular attendant upon that institution in Lincoln's Inn which has given the world so many celebrated surgeons—King's College Hospital.

He seldom uses the spray with which his name is connected, but he took good care to impress upon us that it was necessary in such cases to exercise all the more care in other respects. He is now experimenting with a new antiseptic with which many of the wounds in his wards, surgical and otherwise, are being dressed. Lister's treatment of goitre is to cut down the tumor, and with a smooth-edged scoop remove the *interior* of the gland, which in this particular situation is not well supplied with blood. Antiseptic dressings are applied and the shrinkage of the gland cures the goitre. Lister's bandages, gauze, wool, etc., are now colored with aniline blue which is discharged

when touched by blood serum, liquor puris, or other alkaline fluid, and in this way evidence is at once afforded, without entirely disturbing the dressing, as to whether redressing is required or not. He uses the mixed silk or cotton elastic bandages where pressure is needed over a wound, and nearly always where we would employ the simple cotton bandage. Drs. Lionel Beale, Burney Yeo and W. S. Playfair (the well-known obstetric writer) are in active attendance here. A bluff surgeon, still young in energy, though old in knowledge and getting old in years, is Mr. John Wood of "radical cure for hernia" fame. And it must be acknowledged that, from what can be seen upon any of Mr. Wood's days of attendance there, one cannot but admit the desirabilty of operating in such cases as Mr. Wood himself would choose. Here, too, Mr. Hy. Smith uses his own clamp and cautery for the removal of hemorrhoids—a friendly common-sense man whom one cannot follow without benefit. No visitor to London should omit from his programme at least two museums (although there are many others)—that of the Royal College of Surgeons in Lincoln's Inn Fields and the splendid collection of wax casts in Guy's; and if he will so arrange his visit to the latter hospital during Mr. Bryant's hours he will encounter a surgeon who is worth listening to. Here, too, attend Drs. Pye, Smith and Galabin, with Messrs. Golding Bird, Daires, Colley, and others equally well-known. Guy's hospital has attached to it obstetric wards where, in this land of rachitis, one can witness more Cæsarian sections, craniotomies and cases of deformed pelvis in one month than would be seen in the Lying-in hospitals of Canada during a year. The Out-door attendance upon the poor women of the South Thames region about London Bridge must be of great value to students of Guy's. It has been remarked with too much truth that London clinical teachers suffer from *aphonia*. Of course I shall not here mention names, but it is inexpressibly aggravating when one has crossed the Atlantic to "sit at the feet" of some medical or surgical Gamaliel to find that he speaks in a whisper and cannot be heard without the assistance of an ear trumpet. I could mention the name of more than one, of world-wide fame, the sound of whose voice does not reach the average ear if it be placed more than two feet away from the speaker's head. A man may be a very Solomon for wisdom, but he might as well speak to an audience of deaf-mutes as attempt to give bedside instruction in a whisper. No such accusation can be brought against Dr. W. R. Gowers, the shining light of the National Hospital for the paralysed and the epileptic. Dr. Gowers always has a large following of graduates principally, and his Out-patient Clinic is an admirable one, and should not be missed by the visitorto London. The building itself is a beautiful structure, and its situation on a quiet, shady side of Queen's Square is all that can be desired. For those who would make a further study of nervous diseases, there are the hospital for paralysis and epilepsy in St. John's Wood, and the clinic of Mr. Hughlings Jackson at the London Hospital. I must not forget the well-known names, in this connection, of Dr. Charlton Bastian and Dr. Ferrier, both physicians for out-patients, at the Queen's Square Hospital. One can *revel* in skin diseases here if he is so inclined. Skin departments of the general hospitals, special hospitals and dispensaries are crowded with cases.

I would recommend specially the Out Clinic of Dr. Liveing at the Middlesex Hospital, Dr. Stephen Mackenzie at the London Hospital, that of Dr. Radcliffe Crocker at the University College Hospital, and the Evening Clinics of the attendants upon St. John's Hospital for diseases of the skin in Leicester Square. I do not personally know anything of the Skin Hospital in Blackfriars, but the names of Messrs. Jonathan Hutchinson, Waren Tay, and J. F. Payne are among the attendants, and are a guarantee that the material is properly worked up. Sooner or later the majority of medical stragglers here reach the far off London Hospital, Whitechapel Road, situated in the midst of the poorest part of the city, "where it can do most good." There is nothing prepossessing about its exterior; it has nothing of the architectural beauty or delightful situation of St. Thomas', and cannot boast either the landed wealth or hoary associations of St. Bartholomew's or the aristocratic support of St. George's, but it probably has more beds constantly filled than any of these and more varied material than any one of them, while, for teaching, the Clinics of Mr. Treves and Dr. Stephen Mackenzie are largely attended and cannot be exceeded. Mr. Treves is especially attractive, with his pleasing manner, good delivery, conciseness of method and success as an operator. Sir Andrew Clark does not now attend here very regularly, and Mr. Jonathan Hutchinson's term of twenty years has expired. Among the other attendants are Dr.

Henry Sutton, Dr. Gilbart Smith, Dr. S. Fenwick (the author of the admirable little book on Diagnosis) and Messrs. Rivington and McCarthy. Diseases of women have not received as much attention here as in America, partly, perhaps, because in the latter country the other sex are more prone to their peculiar diseases than in England, and, as a consequence, the average English practitioner is not as conversant with the technology of the gynecological art as we are.

However, besides the gynecological department of most of the Lying-in and General Hospitals there are several institutions devoted entirely to gynecology. I speak particularly of the hospital for women in Soho-Square and the new hospital for women, Marylebone Road. I had a short time ago the pleasure of seeing, during the course of the same afternoon, abdominal sections by two extremists as regards Listerism. They took place in the Samaritan Hospital, near Portman Square, where visitors from all parts of the world are cordially welcomed. We signed the usual "antiseptic contract," and first saw Dr. Granville Bantock remove a large subperitoneal myoma of the uterus. There was nothing specially noticeable about the operation, except that chloroform was given throughout *and antiseptics were entirely omitted.* Dr. Bantock kindly explained that the fluid in which his sponges, instruments, hands, etc., were washed was plain unadulterated tap water, and that he did not employ any kind of antiseptic. He claimed that he has had a larger share of successful cases since giving up the spray and the so-called antiseptics, and referred us to his well-known article on carbolic acid poisoning in abdominal surgery. In a room below we saw Dr. W. A. Meredith remove an ovarian tumor amid a cloud of carbolic mist, surrounded by towels dipped in germicide solutions, and assistants glistening with sublimated dew. He washed his hands in carbolic lotion every few minutes and made the peritoneal toilet with unusual Listerian care—and we left wondering. To an ignorant Colonial like myself it occurred to me that the truth probably lay somewhere between these two extremes. The Samaritan is the hospital where Mr. Knowsley Thorton operates, and to which Sir Spencer Wells was formerly actively attached. The course in gynecology at the Soho-Square Hospital is said to be an admirable one, and under the direction of men like Mr. Mansell-Moulin, Drs. C. H. Carter, Edmund Holland and Mr. Reeves the student should learn readily the elements of English gynecology. The student of diseases of the eye can have ample scope for his surplus energies in any of the Opthalmic or General Hospitals of London. I can only speak from personal experience of that fine institution in Moorfields, the Royal Ophthalmic, where Mr. Tweedy, Mr. Lawson and Mr. John Couper were in attendance, and where there appeared to be unlimited run of cases accessible to the student. Affections of the ear are usually treated here with throat troubles, a much more sensible idea than the usual association with the eye. The charity rendered famous by the labors of Dr. Morell Mackenzie is called The Hospital for Diseases of the Throat, and is situated in Golden Square, and is well worth a visit. On Gray's Inn Road is the Central London Throat and Ear Hospital of which Mr. Lennox Browne is chief surgeon.

I regret that, owing to his illness, I was unable to see Dr. Green, the author of the "Pathology" although I haunted Charing Cross Hospital, of which he is one of the physicians. From what I have seen of the work done in the *post-mortem* room here I do not know that either in their use of material or in the practical application of it for teaching purposes we have much to learn from the practical pathologists that I have seen.

Specialism has an entirely different significance here from that form of it which one encounters in Canada. Speaking generally, while the profession here is distinctly divided into surgeons and physicians it is not sub-divided into oculists, aurists, and throat doctors, nerve doctors and gynecologists. The man who devotes his time to one special group of diseases does not do so to the exclusion of the others, nor does he inaugurate his new departure in life by affecting to forget all his previous experiences of other departments of medicine and surgery. Indeed I have on more than one occasion heard a well-known specialist here declare his satisfaction at the advantage and help he derived in his special line from his general practice. And this has always seemed to me the proper antidote to the growing evils of specialism. The human organism is not a collection of isolated organs and structures but a correlated system making up a "harmonious whole," and should be treated as such.

Many of the names familiar to us as household words are disappearing from the active hospital list, and are rarely seen within hospital walls. As

consultants in medical societies, and as writers of books and contributors to periodicals they are best known to the profession. Among many such are Sir James Paget, Sir Henry Thompson, Sir Prescott Hewett, Mr. Jonathan Hutchinson, Dr. Russel Reynolds, Sir Wm. Jenner and Mr. LeGros Clark. Yet in their green old age many other celebrities still lead an active hospital life. Mr. Timothy Holmes still teaches at and attends St. George's; Dr. Pavy at Guy's; Dr. Playfair is still physician accoucheur at King's College Hospital; Drs. Wilson, Fox, Sydney, Ringer and Mr. Christopher Heath can be found at University College Hospital, and so on. I have been politely and kindly received at all the medical institutions here although I have doubtless been set down as an average specimen of a "walking interrogation point with the dyspepsia"—the formula by which the American visitor is sometimes designated. I hope before leaving England to give you an account of the meeting of the British Medical Association in Brighton where I hope to see a number of Canadian confrères. Dr. Holmes told me that he must leave here in time for the meeting in Quebec of the Canada Medical Association, of which, as you know, he is President. Mr. Fowke, General Secretary of the former Association, suggested to a few members of the Canadian contingent here that the C. M. A. should become a branch of B. M. A. How does that strike you?

C. A. W.

London, July 6th, 1886.

Progress of Science.

ON THE TREATMENT OF PAINFUL MENSTRUATION AND STERILITY FROM FLEXION.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Goodell, M. D.,

Professor of Gynecology in the University of Pennsylvania.

Gentlemen: While our patient is getting her ether in the waiting-room, let me give you her history. It is a history which will soon be to you as familiar as household words, whether you practice in cities or at cross-roads. She is a young woman who has been married eight years; but she has never conceived, and since puberty has suffered from very painful menstruation. Since her marriage, her periods, as is usual in such cases, have been getting more and more painful. At present, not only are they unbearable, needing large doses of opium, but she is yearning to become a mother.

Now, what lesions shall we probably discover in this case? Ten to one, a womb bent forward on itself, and a narrow uterine canal. True, the displacement may turn out to be a retroflexion, but this is a lesion almost peculiar to the child-bearing womb, while anteflexion is the natural condition of the nulliparous womb. Here let me disabuse your minds of a prevalent error, viz: that anteflexion in itself is a pathological condition. Many text books speak of this flexion as a lesion, and exhibit many forms of pessaries devised to rectify this so-called displacement. But in the great majority of cases neither anteflexion, nor, for the matter of that, anteversion, is pathological. In almost every unmarried or barren woman you will find the womb either bent forward or tilted forward, and resting on the bladder; for this, in varying degrees, is its natural position. The mistake made is in attributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so liable. But the kinship between the brain and the bladder is a remarkably close one. This has lately been studied by two Italian physiologists, Mosso and Pellacani, who go so far as to contend that "every mental act in man is accompanied by a contraction of the bladder." The irritability of the bladder is then one of the first symptoms of loss of nerve control. Everybody is liable to it. You, on examination day, will be annoyed by it. Many a lawyer before pleading an important case, and many a clergyman just before delivering a discourse, is compelled from sheer nervousness, to empty the bladder. So it is with the lower animals, which, when frightened, micturate involuntarily. A nervous bladder is then one of the earliest phenomena of nervousness. Now a hysterical girl, or a woman whose nervous system has collapsed under the strain of domestic cares, consults a physician for such symptoms of nerve prostration as wakefulness, utter weariness, a bearing down feeling, backache, and perhaps, above all, an irritable bladder. Upon making a digital examination he, of course, finds the fundus of the womb resting on the bladder, and at once jumps to the conclusion that the whole trouble is due to the pressure of the womb on the bladder, viz: to the existing anteflexion, or to the anteversion as the case may be. He now makes local applications, and racks his brain to adapt or to devise some pessary capable of overcoming the supposed difficulty, forgetting that the upward or shoring pressure of the pessary on the bladder must be greater than the corresponding downward, or gravity, pressure of the womb. There is, in fact, no pessary but the dangerous stem-pessary which can meet the end without pressing upon a fold, or double thickness, of the bladder. But, very fortunately, anteflexion is not often pathological. It is certainly not pathological in the foregoing instances; for the symptoms, especially the vesical ones, are not due to the pressure of the womb upon the bladder, but to

sheer nervousness, or nerve prostration, which is the thing to be treated, and not the womb. There are exceptions to this rule, but not many. For instance, a womb, heavy from subinvolution, or from the presence of a fibroid, may make uncomfortable pressure on the bladder.

If anteflexion is the natural position and condi- of the womb, when is it pathological? It is pathological whenever it is the cause of dysmenorrhœa or of sterility. Usually dysmenorrhœa and sterility are associated, but occasionally the latter is the only symptom; for it is evident that the crooked womb can more readily expel fluid contained within it than admit a fluid outside of it. The phenomena of a typical case of dysmenorrhœa from anteflexion or from retroflection, are as follows: At the outset of menstruation the first few drops are somewhat painful. The pain then increases in severity until, reaching its acme, a sligh gush of menstrual fluid takes place, followed by a lull in the sufferings. The pain then gradually increases until it culminates in another gush. The meaning of this is, that the bend in the womb imprisons the menstrual fluid, which goes on collecting in the cavity until the swelling up of the comb straightens out the bent portion, dilates the narrow canal, and allows the pent-up contents to escape, just as the coils of a hose first swell, and then straighten out before the water can flow through them. Relief from pain lasts until the fluid begins again to collect. This is called stenosis from angulation.

Sometimes a girl has little or no pain at her menstrual periods. She marries, does not conceive, and by and by dysmenorrhœa sets in, which goes on increasing. What is the explanation of this? It means that the flexed canal of the womb was originally just large enough to permit the slow escape of the menstrual fluid, but that the congestions from sexual intercourse have caused a thickening of the lining membrane of this canal, which has narrowed its calibre. Then, again, the uterine efforts to force out the pent-up fluid cause the various tissues of the womb to hypertrophy. We see this also in unmarried women, the dysmenorrhœa increasing with their age. Nature intends that the periodical congestions of the womb should be interrupted by pregnancy and lactation, and without these interruptions the mucous lining of the womb is liable to thicken, and by its thickness to narrow the canal. If then, to these menstrual congestions be added the sexual congestions of marriage, this hypertrophy is greatly increased, and the barren wife suffers more than the old maid.

But here comes our patient. Let me examine her. Sure enough, she has an anteflexion, for through the anterior wall of the vagina I feel the body of the womb resting upon the bladder. The cervix is long and conical, the os externum very small.

I pass the sound. It stops, as you see, at the internal os—viz: at the beginning of the bend—and I can not coax it in any further. By introducing the speculum, and straightening the womb by traction made with a tenaculum, the sound now goes in, but even yet with difficulty. It gives a measurement of nearly three and a half inches, which is a large measurement for a young woman who has not borne any children. This hypertrophy is owing partly to such repeated congestions as I have just described, and partly to the muscular effort made by the womb to extrude not only the menstrual fluid, but its mucous secretions.

Now, what is the remedy for this condition? For a number of years the operation most in vogue was the cutting, or bloody operation of Sims. By it the canal is enlarged by incisions. But the objections to this plan are: that it is a dangerous operation, having caused the death of many patients through peritonitis; that it is not a very successful operation, as the incisions are liable to heal up and the dysmenorrhœa return; and finally that it always deforms the cervix, and sometimes causes lesions analogous to those resulting from a natural laceration during the labor. I shall not, therefore, burden you with the details of this operation which, fortunately, is falling into disuse. Then, again, the cervix, is, at the present day, often dilated by tents, or by graduated bougies: but the former is dangerous, and both are painful, tedious, and unsatisfactory.

The operation which I can recommend to you most highly, and one which I shall now perform on our patient, is that of forcible dilatation. The instruments which I use are two modified Ellinger dilators of different sizes, made under my supervision by Messrs. J. H. Gemrig & Son, of this city. Ellinger's model is the best on account of the parallel action of the blades, which dilate the whole track of the canal uniformly. The smaller of these dilators has slender blades, and it pilots the way for the other, which is more powerful, having blades that do not feather. The lighter instrument needs only a ratchet in the handles, but the stronger one should have a screw by which the handles are brought together. Lest the beak should hit the fundus uteri, and seriously injure it when these instruments are opened, their blades are made no longer than two inches, and are armed with a shoulder which prevents further penetration. The larger instrument opens to an outside width of one and a half inches, and its blades are roughened, or corrugated, by shallow grooves, in order to keep them from slipping out. The dilator has also a graduated are in the handles by which the divergence of the blades can be read off.

In a case of dysmenorrhœa, or in one of sterility from flexion or from stenosis, as in the woman before us, my mode of performing the operation of dilatation is as follows: The patient is thoroughly anæsthetized, and a suppository containing one grain of aqueous extract of opium is slipped into the rectum. She is then turned on her

back and drawn to the edge of the bed, each knee being supported by an assistant. The light must be good, so that the operator can see what he is about. My bivalve speculum being now introduced, the vagina is well swabbed out with a five per cent solution of carbolic acid. By the aid of a strong uterine tenaculum the cervix is steadied, and the smaller dilator is introduced as far as it will go. Upon gentle stretching open that portion of the canal which it occupies, the stricture above so yields that, when the instrument is closed, it can be made to pass up higher, Thus by repetitions of this manœuvre, little by little, in a few minutes' time a cervical canal is tunneled out which before could not admit the finest probe. Should the os externum be a mere pinhole, or it be too small to admit the beak of the dilator, it is enlarged by the closed blades of a pair of straight scissors, which are introduced with a boring motion. As soon as the cavity of the womb is gained, the handles are gradually brought together, and allowed to stay for one or two minutes. The small dilator being now withdrawn, the larger one is introduced and the handles are then slowly screwed toward one another. If the flexion be very marked this instrument after being with drawn should be reintroduced with its curve reversed to that of the flexion, and the final dilatation then made. But in doing this the operator must sake good care not to rotate the womb off its axis and not to mistake the twist for a reversal of flexion. The ether is now withheld, and the dilator kept *in situ* some fifteen minutes, when it is closed removed, and the vagina well syringed out with the same solution of carbolic acid. Occasionally a slight flow of blood will last for several days after the operation, stimulating the menstrual flux. Often the flux is precipitated, or it is renewed,if the operation follows or precedes it too soon. The best time for dilatation is,therefore,midway between two monthly periods. Were the case before us a retroflexion, I should, after the dilatation, put in a pessary long enough to span the ankle of flexure. This never fails to straighten ot the womb, and in time to restore it.

Although this operation looks like rough work when compared with the neat but dangerous cutting one, the patient will probably need not more than two suppositories, and she will complain merely of soreness for one or two days. To forestall any tendency to metritis she will be kept in bed until all tenderness has disappeared. Pain will be met by rectal suppositories of opium, and by large poultices laid over the abdomen. From this operation I have seen only slight pelvic disturbance, but it has always been readily controlled and has not given alarm. In one case of dilatation, complicated by a fibroid of the wom[illegible] uterine colic lasted for several days, but finally subdued by asafœtida in large do[illegible] never became inflammatory. Should the ature rise, and symptoms of pelvic inflar[illegible] appear, the ice-bag should replace the warm poultice. But I have not yet met with a temperature high enough to need this energetic mode of treatment.

In the great majority of cases I dilate the canal not to the fullest extent of the larger instrument, but, as in the case before us, to one and a quarter inches. Sometimes, in an infantile cervix, which does not readily yield, and might give way, the handles are not screwed closer than three quarters of an inch or an inch, but this is exceptional. Tearing of the cervix has happened in four of my cases—in two from the sudden slipping out of the beak, and in two from sheer stretching. Three of these were unmarried, and the cervix of each was split posteriorly, nearly half-way to the vaginal junction. The rent looked exactly like the incision of the cutting or bloody operation, but it was only half the length of the latter. As it kept the os externum patulous, and could not do any mischief, I did not sew it up. The fourth case was that of a multipara, whose uterine canal had been nearly closed up by applications of silver nitrate, made by her physician, with the view of curing what he supposed was an "ulceration of the os," but which was a bilateral laceration. The tissues, rendered cicatricial and brittle by the caustic, were torn by the dilator for about half an inch on the right side. Here the hemorrhage was free enough to need styptic applications and a light tampon. I could have stopped it by wire sutures, but this was not done, as it would have defeated the object of the operation.

For slight dilatations, such as for the office treatment of anteflexions and of stenosis, or for the introduction of the curette, or of the applicator armed with cotton, the more delicate instrument is quite strong enough, and an anæsthetic is not needed. I also use it in women who object to taking ether, but the operation is then very painful, and it has to be repeated several times, while the results are by no means so good as when the canal has been dilated by the larger instrument and under ether. Occasionally in virgins, in order to save the hymen I have dispensed with the speculum, and have dilated with the more slender instrument, passing it in along my finger, bu[illegible]is can not always be done, and it is usually[illegible]factory. I was led to this because, on or[illegible]n, I was asked give a certificate of [illegible] other word write and sign a p[illegible] that before operation the hymen [illegible] I also had this in the case of a[illegible] woman, w perineum, in spite of [illegible] as badly to my efforts to deliver [illegible]etric force very large fibroid tum[illegible]b. When returned home the vi[illegible]t up suc buzz of scandal that I [illegible]her defen[illegible]d womb, [illegible]metimes, in a very sh[illegible]s interna [illegible]can not be mad[illegible]assing in [illegible]ficulty is overc[illegible]guide, d [illegible]probe, and then

After a forcible dilatation under ether, the cervical canal rarely returns to its former bent or former narrow condition. Since lateral extension of elastic bodies antagonizes their length, the cervix shortens and widens, and the exudation provisionally thrown out by the submucous lesions sustained by the dilated part serves still further to thicken and stiffen its tissues. In other words, the stem-like neck of the pear-shaped womb is shortened, widened, strengthened, and straightened. Hence for straightening out anteflexed or congenitally retroflexed wombs, and for dilating and shortening the canal in cases of sterility, or of dysmenorrhœa arising from stenosis, or from a conical cervix, the dilator will be found a most efficient instrument. Sometimes, in sharply-bent wombs, I put in a stem-pessary immediately after the dilation. In retroflexions I always put in a pessary long enough to span the angle of the flexion, so as to straighten the womb by making pressure on the fundus. To this occasionally a stem pessary is added.

In its results this operation is not an infallible one. I have thrice been obliged to repeat the dilatation, and would like to do so in several cases did the women permit. In a very few cases I have been forced, as a final resort, to nick a pinhole os externum. But I had not then learned how far I could safely stretch open the uterine canal, and the operation of dilatation was, therefore, not so efficiently performed by me as it is now through a larger and riper experience.

It is not to cases of sterility or of dysmenorrhœa only that rapid dilatation should be limited. As before stated, I use it to stretch open the canal for the admission of the curette and of tents, or for the purpose of making applications to the uterine cavity. In cases needing irrigation of the uterine cavity, I first dilate the canal with the slender instrument, and introduce the nozzle of the syringe between the separated blades. This gives a free avenue for the escape of the liquid, and robs of its dangers this form of intrauterine medication. I also resort to the dilator in order to explore the womb with the finger. For instance, in a given case of menorrhagia, in which a polypus or some other uterine growth is suspected, in order to avoid the delay and the dangers inseparable from the use of tents, I put the woman under an anæsthetic, and after the rapid dilatation of the cervical canal to the utmost capacity of the instrument—viz., one and a half inches—am enabled to ss my finger up to the fundus. This is accomhed either by drawing down and steadying the ıb by a volsella forceps fixed on to the anterior ır, in thin subjects, by forcing the womb ıpon the finger through suprapubic pressure ndus. In this way I have, over and over ne sitting, discovered a uterine growth, off, and removed it. Usually in these difficulty has been experienced in polypus, or other growth, through ıl, than in twisting it off from its uterine attachment. It often has to be wire-drawn before its removal can be effected, and sometimes it will be found needful to enlarge the os uteri by a few nicks. Usually, when the menorrhagia has been free, the cervical tissue is so lax that, after dilatation, the index-finger can penetrate the canal and reach the fundus, but sometimes only its tip can be made to pass the os internum. Yet even this limited degree of penetration is commonly quite enough to decide the presence of an inside growth. If it be not enough, I invariably search for the growth with a small pair of fenestrated forceps, and I have repeatedly seized and removed one, the existence of which was merely suspected. After such operations the uterine cavity and the vagina are thoroughly washed out with a two and a half per cent solution of carbolic acid.

I am sorry to say that I have not kept full records of all my cases of rapid dilatation. For instance, I have rarely tabulated office cases of dilatation, in which ether was not given. Nor has any note been made of cases in which dilatation was performed under ether for curetting, for digital exploration of the endometrium, or for the removal of uterine growths. I have tabulated merely cases of dysmenorrhœa, in single or in married women. In the married, with but three exceptions which will be noted in the proper place, painful menstruation was associated with sterility.

Including all the cases of dilatation performed under ether, I must have had nigh three hundred and fifty cases. I have limited myself to these cases because the use of an anæsthetic implies full dilatation—one in which serious injury, if ever, would most likely be sustained; yet there has not been a death, or a case even of serious inflammation, in my practice, and the results have been most satisfactory—far more so than when the cutting operation was performed by me.

Let me read to you a brief abstract of the statistics of my cases of dysmenorrhœa: Of single women there were one hundred cases; of married, one hundred and nineteen, making in all two hundred and nineteen. Of the unmarried, twenty-four were unheard from after the operation, leaving seventy-six from which any data could be obtained. Of these, forty-five cases were virtually cured, twenty-four more or less improved, and seven were not at all improved. Of these seven that were not benefited by the operation, five subsequently had their ovaries removed—one of them by another physician, and four by myself; of the latter, one died. In each one the ovaries had become so changed by cystic or by interstitial degeneration as to make the dysmenorrhœa otherwise incurable. Of the twenty-four improved, there was one on whom oophorectomy was also performed; for, although the dysmenorrhœa was partly relieved by dilatation, ovarian insanity and menorrhagia were not. The operation was a successful one, and my patient was not only cured of her hemorrhages, but she regained her reason. Out of these cases, the

majority, although not wholly cured, were greatly improved. For example, one of them was formerly bedridden during the whole period of her menstrual flux, and had then to take large doses of morphia. She also suffered at those times from hæmatemesis and epistaxis. Since the operation she experiences pain for merely two hours, needs no anodyne, and has lost her octopic hemorrhages. Her gain in health and flesh has been great. Another one, who was wholly crippled by her sufferings, and made nervous by the dread of them, is now a busy nurse. For one hour at every period she suffers acutely, but not enough to overcome her dread of taking ether and of having a second dilatation performed.

Of those cured, two had had Sims' cutting operation performed previously without benefit, and were afterward dilated; three were dilated a second time before a cure could be effected. The word "cured," in some of these cases, does not mean that the women were wholly free from any pain whatever, but that they did not suffer sufficiently either to go to bed or to take any stimulants or anodynes. The history of several cases merit more than a mere allusion. The sufferings of one of my patients, at every monthly period, has always been great, but while she was at boarding school they grew so excruciating as to cause furious delirium at those times. This finally culminated in permanent insanity, with suicidal impulses. While in this condition she was placed in my hands. After rapid dilatation of the cervical canal, the dysmenorrhœa wholly disppeared. The exemption from pain toned down some of her more extravagant delusions, but she did not wholly regain her reason until a few months afterward. She is now free from all menstrual pain, and is in the complete possession of her mental faculties.

A Hebrew lady, whose health had suffered from dreadful dysmenorrhœa, was so greatly improved by one dilatation that her physician and her friends were amazed at her rapid restoration to health. Not long afterward the doctor asked me to perform the same operation upon another one of his patients, who was, if anything, worse. Her sufferings were so severe that he wrote, "I fear that another period might kill her," and urged an immediate operation. The cervix in this case was conical and very dense. Fearing a tearing of the parts, I screwed the instrument very slowly up to one inch and a quarter, and kept up this amount of dilatation for twenty minutes. The cervix did not sustain any injury. The canal has since stayed open, and she is free from all menstrual pain. Another case was that of an unmarried lady, sent to me from a distant State, whose sufferings at her periods were so great that morphia, however administered, was not potent enough to allay them, and her nervous system became very much shattered. Finally, at her last monthly, she was compelled to have two physicians in attendance on her, who took turn about in administering chloroform night and day for forty-eight hours. This experience decided them to send her to me. One dilatation of an inch and a quarter wholly cured her.

Of the married, sixty-nine were heard from. Of these, forty-seven were virtually cured, eighteen improved, and four unimproved. Out of these sixty-nine cases, eleven were not in a condition to conceive—four of them from fibroid tumors of the womb, two from destructive applications of silver nitrate to a torn cervix, three from being over forty-one years of age, and one from being a widow. This leaves but fifty-eight capable of conception, and of these, eleven, or about nineteen per cent. became pregnant. But the ratio is, in fact, larger, for I know that several of my patients, fearing pregnancy, employed preventive measures after the operation, and I suspected several others of doing the same thing. Then, again, I believe that yet others, who consulted me merely for painful menstruation, have not reported their subsequent pregnancies. For instance, of the eleven cases of pregnancy, five came to my knowledge incidentally, and not directly from the ladies themselves. It is not much more than a year ago that I learned, by the merest accident, the subsequent history of a clergyman's wife, whose cervical canal I had dilated six years ago. She had been making up for lost time by giving birth to twins within a year after the operation, and later to several other children. She had been married eight years before she came to me, and had had her cervical canal dilated by tents and siit up with Peaslee's metrotome by a skillful surgeon.

One word more: While you can expect much from this operation whenever it is for dysmenorrhœa caused by flexion or stenosis, you can not be so sanguine with regard to its results in sterility. The reason of this is, that sterility, associated with dysmenorrhœa, often leads to such tissue changes in the womb as in time to make it incapable of forming a nest for the ovum, which, therefore, either escapes or perishes.—*Medical News.*

SAFE, SIMPLE, AND EFFECTIVE MODE OF TREATING PROLAPSE OF THE RECTUM AND HEMORRHOIDAL TUMORS.

Dr. Q. C. Smith thus writes in *Gaillard's Medical Journal:*

By the method here proposed I have treated three cases of prolapse of the rectum and about a dozen cases of hemorrhoidal tumors.

The cases of prolapse of the rectum were all the result of parturition, and two of them were, or appeared to be, complete, *i.e.*, all the coats of the bowel had passed out through the external sphincter.

These cases of rectal prolapse and hemorrhoidal tumors were treated by injecting into the tissues with the hypodermic syringe an eight-grain solution

of muriate of cocaine, plus an equal volume of phenol sodique.

The quantity of this solution injected varied from twenty minims, in small hemorrhoidal tumors, to one ounce in prolapsed rectum.

One injection was sufficient to cure hemorrhoidal in all my cases, while two to four trials were found necessary to cure prolapsed rectum. The syringe point was introduced at the most prominent point of the tumors—large or small—and thrust boldly to the most vascular part of their base, and a liberal portion of the solution deposited, according to the size of the tumor. Then the balance of the tumor was well saturated with the solution. After injecting hemorrhoids no topical treatment was applied, except a daily wash of dilute solution of boric acid, as hot as could be borne. After injecting prolapsed rectum a mild antiseptic healing salve was applied. The following formula was found very efficient;

℞. Iodoform, in *fine* powder,
Balsam Peru,
Oil of camphor,
Oil of sassafras, aa ʒ ss.
Pine tar,
Castor oil,
Powdered aloes, aa ʒ j.
Subnitrate of bismuth enough to make a stiff salve.

S.—Apply thoroughly twice a day, and cover with a soft cloth.

Before applying the salve each time, the parts were well washed with the syringe, soap suds from Packer's tar soap, as hot as could be borne, being employed for the purpose.

In addition to whatever general internal treatment may be indicated in any given case, I am in the habit of directing, with excellent results, something like the following:

℞. Fl. ext. witch-hazel ℥ ss.
Sat tinct. horse-chestnut ʒ j.
Muriate of ammonia, ʒ j.
Glycerine, ad ℥ iv.
M. ft. sol.

S.—A teaspoonful three times a day, just after meals, on alternate days.

℞. Muriate of hydrastin, gr. xxiv.
Ergotin, gr. xij.
Ext capsicum,
Ext. ipecac.,
Aloin, aa gr. vj.
M. Make 24 pills and silver-coat.

S.—One pill three times a day, just after meals, on alternate days.

These last two prescriptions should be administered regularly, on alternate days, as long as the hemorrhoids or prolapse give trouble, and for several weeks after they have ceased to do so.

For bringing hemorrhoidal tumors to view, O'Neal's rectal speculum was found most convenient, though in some cases Woodward's and Sims' rectal speculums served a good purpose. After operation on hemorroids patients were allowed to attend to their ordinary business at pleasure, and a majority of them did so.

The cases of prolapsed rectum were confined to bed until cured, which was in the mildest cases about two weeks, and in two severe or complete cases about four weeks. They were then allowed to move gently about the room, but the patients being parturients, the horizontal posture and quietude were doubly indicated. No general anæsthetic was found necessary in any of these cases, as the operations produced but little pain or subsequent soreness. No inflammatory reaction followed the injections.

I have used various medicaments for injecting hemorrhoids, all with more or less success, never having met with any deplorable results; but the eight-grain muriate cocaine solution, in connection with an equal volume of French-made phenol sodique, has proved the best that I have tried.

In conclusion, the writer begs to state that he is familiar with what has been published in reference to this subject in standard and periodical literature for the last twenty years, and hence claims no originality in the treatment outlined in this communication.

COLD BANDAGING OF THE LEG IN INSOMNIA.

Dr. Von Gellhorn has found the following plan very useful in inducing sleep in persons who suffer from insomnia. A piece of calico, about eighteen inches wide and two and three-quarter yards long is rolled up like a bandage, and a third of it wrung out of cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of guttapercha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by Winternitz that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage, the decrease amounting to 0.4° Cent., and the normal not being again reached for from one and a half to two hours afterwards. The author has employed this means of procuring sleep, for a couple of years and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to reapply the bandage every three or four hours, as it dried.—*British Med. Jour.*

HYDRASTIS CANADENSIS IN METRORRHAGIA.

Dr. J. A. Akuloff, of Wilna, details (*Wilna Medical Society*) the case of a married woman, aged 42, who had been for nine years suffering from profuse flooding occurring every two weeks. Treatment by intra-uterine injections of perchloride of iron and subcutaneous injections of ergotin had

wrought no improvement. On examination, there were found dilatation of the cervical canal, enlargement, hardness, and impaired mobility of the womb, considerable distention of the cervical veins, and numerous easily-bleeding erosions scattered over the whole mucous membrane of the cervix. Fluid extract of hydrastis Canadensis, in doses of twenty minims three times daily, was given for about three months. The first catamenia were yet profuse, lasting about ten days, but subsequently they returned only once a month and lasted each time three days, the amount of blood being moderate. A decrease in the bulk of the womb was also noted at the end of three months' treatment.—*London Medical Record.*

TO ARREST NASAL HEMORRHAGE.

We take the following practical suggestion of Prof. John Chiene, from the Edinburgh *Medical Journal:*

In persistent hemorrhage from the nasal cavity, plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air from passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position and the hemorrhage is checked.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL JULY, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

A special meeting of the Board of Governors was held July 13th, 1886. Present: Drs. Lemieux (President), Belleau, LaRue, Simard, Lachapelle, P. E. Mignault, R. P. Howard, Parke, Leprohon, Kennedy, Durocher, H. A. Mignault, Marmette, Guay, De St. George, Hart, Rodger, Lanctot, George Ross, Austin and Campbell.

Reports of Assessors from Laval and McGill Universities were read and adopted.

Drs. Delaney and John Howe, graduates of Laval, Quebec, on presentation of their diplomas, received their licenses.

The report of the preliminary examination in May last was read, showing that the following gentlemen had passed: Messrs. Arthur Baribault, Rodolphe Chevrier, J. A. Charette, Frs. Desrosier, Emile Dumont, W. S. England, Paul Gagnon, Chs. Gerard, John Hayes, Edmond Huot, Henri Lanciaux, Theodule L'Ecuyer, L. E. La Roche, G. E. Le Sage, L. de Martigny, Pierre Lussier, Frs. Marchand, J. L. G. Mason, C. D. Meikle, Oscar Mercier, G. L. McKee, C. E. Morin, L. A. Noel, J. O. Poitras, Edmond Provencal, Euclide Rainville, Hector H. Roy, F. Serres, L. St. Germain, F. E. Thompson, L. V. Vezina, E. A. V. Villeneuve, Armand Bedard, T. Belanger, Ant. Brossard, L. M. F. Cypihot, Jules Dandurand, Joseph Desy, A. U. Dorais, Henri Fortier, E. Laurin, F. Lavoie A. Lecavalier, Jos. Lemai, Chs. Lemaire, J. A. Magnan, Jos. A. Rene, F. Richard, L. Robillard, Edmond Savard, A. Taillefer, J. C. P. Tasse, Chs. Vezina, Jos. A. Bedard.

The Secretary then read the report of the committee as published. A minority report was then read, when it was decided to take up the original report, and discuss it, clause by clause.

The College first decided in the affirmative that it was decided to have a Central Board of Examiners.

Clause 1 was amended to read as follows:—

The Board shall be known as the Central Board of Examiners, and shall consist of two (2) examiners on each subject. That the examinations shall be made in the language of the candidate, provided that the two examiners shall have the right to examine alternately, and when they disagree, the examination on the subject shall be taken before the full committee.

Clause 2, so as to read, "The Central Board of Examiners shall consist of two representatives from each medical school, and an equal number not connected with any school."

Clause 3 was amended so as to correspond to the amendment in clause 2.

The remainder of the report was carried with the following alterations:—

1. The Central Board shall meet alternately in Quebec and Montreal.

2. The preliminary examination to be held once a year, on the first Wednesday in July, in Quebec and Montreal alternately.

3. Graduates in Arts not exempted from the preliminary examination.

4. The Board of Governors to meet annually on the second Wednesday in May, alternately in Quebec and in Montreal.

The triennial meeting was held May 14, 1886. About 150 were present,

The minutes of last meeting were read and adopted. Dr. E. P. Lachapelle presented his annual statement.

Dr. Lemieux, President, addressed the College on the work done by their Governors during the past three years.

Dr. Fortier objected to some items of expenditure, and moved, seconded by Dr. Laberge, that the Secretaries prepare annually a statement of the work done by the College, and have it printed and a copy sent to each member of the College. This was lost. The College at one p.m. adjourned till two p.m. At two p.m. the College again met, and the following gentlemen were named Scrutineers—Drs. Kennedy, Beaudry, Faucher, Brunelle, W. Mount, L. Mignault, J. B. Gibson, S. Duval, C. S. Parke, Chartrand, Guay, Lanctot, L. LaRue and Hurtubise.

It was announced that the ballot would close at four p.m.

The Secretary for Montreal read the report adopted by the Board of Governors the previous day.

Dr. Cotton moved, seconded by Dr. Norman A. Smith, "That each judicial district be granted power to elect a Governor of the C. P. and S.P.Q. and that each said judicial district elect its representative. Carried.

A motion of Dr. Marcil, seconded by Dr. Durocher, as follows, was carried:

"That the preliminary examination for the study of medicine comprise, in future, the subjects of physics, chemistry and philosophy. That this preliminary examination be held on the second Wednesday in July of each year."

Moved by Dr. Dagenais, seconded by Dr. Brosseau: "That the primary and final examinations shall be held on the second Wednesday in July in each year."—*Carried.*

At ten minutes past six o'clock the Scrutineers announced the result of the ballot to be as follows:—

City of Montreal.—Drs. T. A. Rodger and J. L. Leprohon.

District of Montreal.—Drs. H. A. Mignault, J. A. Duchesneau, J. B. Gibson, D. Marcil, F. D. Lafontaine, N. H. Ladouceur, A. Longpré, and J. E. Turcot.

City of Quebec.—Drs. A. G. Belleau, L. LaRue, R. T. Rinfret, A. Watters, C. S. Parke, and E. A. de St. George.

District of Quebec.—M. Guay, F. Fortier, E. Rousseau, F. E. Grandbois, L. H. Labrecque, Hon. T. Robitaille, and A. Laferriere.

District of Three Rivers.—Drs. Hon. J. J. Ross, Badeaux, and Desaulnier.

District of St. Francis.—Drs. Austin, Paré, and Thomas LaRue.

The College then adjourned.

MEETING OF THE NEW BOARD OF GOVERNORS.

The new Board of Governors then met, and elected the following officers:

President, Dr. W. H. Hingston (Montreal); Vice-President for Quebec, Hon. Dr. Ross (Quebec), re-elected; Vice-President for Montreal, Dr. J. L. Leprohon (Montreal); Treasurer, Dr. E. P. Lachapelle (Montreal), re-elected; Registrar, Dr. L. LaRue (Quebec), re-elected; Secretary for Quebec, Dr. A. G. Belleau (Quebec), re-elected; Secretary for Montreal, Dr. F. Wayland Campbell (Montreal), re-elected.

The following Assessors were named:—

McGill University—Hon Dr. Church and Dr. P. E. Mignault.

University of Bishop's College—Drs T. A. Rodger and H. A. Mignault.

Laval University, Quebec—Drs. Simard and Sewell.

Laval University, Montreal—Drs. Marcil and Gibson.

Victoria University—Drs. A. C. MacDonnell and O. Raymond.

A committee, consisting of Drs. Lemieux, George Ross, Hingston, F. W. Campbell, E. P. Lachapelle, Rodger, Belleau, and de St. George, were appointed to prepare amendments to the existing Medical Act, in accordance with the report adopted by the Governors at the special meeting on the 13th July and the resolutions passed at the Triennial Meeting.

CANADIAN MEDICAL ASSOCIATION.

The nineteenth annual meeting of this the Dominion Association will take place at Quebec, on the 18th and 19th of August. We hope to see a large attendance. In the absence in Europe of Dr. Stewart, the Secretary, Dr. James Bell of Montreal, is kindly preparing the duties of that office. Arrangements for reduced rates for those attending the convention have been made. Certificates entitling to those reductions can be had from Dr. Bell. The following papers have been promised :

(1.) Heartclot, Dr. Osler, Philadelphia.

(2.) The Medical Jurisprudence of Crime and Responsibility, Dr. D. Clarke, Toronto.

(3.) Trachœotomy in Membranous Laryngitis, Dr. Bell, Montreal.

(4.) Diabetes Mellitus, Dr. Thos. Dupuis, Kingston.

(5.) The Treatment of Biliary Calculi, Dr. J. Ferguson, Toronto.

(6.) The Inhibition of the Heart in Diphtheria, Dr. Gardiner, London.

(7.) "Alexander's Operation" and the Treatment of Displacements of the Uterus, Dr. A L. Smith, Montreal.

(8.) Excision of the Elbow Joint, Dr. Roddick, Montreal.

(9.) The Treatment of Tuberculous Glands of the Neck, Dr. Fenwick, Montreal.

(10.) Myelo-sarcoma of the Arm—Amputation at the Shoulder-joint, Dr. Fenwick, Montreal.

(11.) A Case of Pelvic Abscess, Dr. Alloway, Montreal.

William H. Vanderbilt had the notion that New York ought to be the medical centre of the country, and about 18 months ago he gave the College of Physicians and Surgeons $500,000 for the expressed purpose of buying grounds and erecting buildings. The family soon became imbued with Mr. Vanderbilt's interest for the Medical College. Mr. Vanderbilt's daughter, Mrs. Sloane, gave a maternity hospital to the institution. The Vanderbilt Clinic, the result of the last donation of $250,000, is the joint gift of the four sons.—*Phila. Bulletin.*

NEW YORK MEDICAL MONTHLY.

We have received the first number of the above Journal issued in May last; it is to be published monthly, as the name implies, at the astonishingly low rate of one dollar per annum. In the field of Journalism there is always plenty of room, especially when the object is practical illustration. The well-known names appended as contributors should ensure its Editor every success, which we trust it will have no difficulty in obtaining.

WYETH'S LIQUID MALT.

This is a very elegant preparation of the Extract of Malt, which has been put on the market by the well-known firm of John Wyeth & Bro., of Philadelphia, and which seems to supply a long-felt want. The numerous cases in which Malt Extract has proved useful has brought it into great demand. To some persons the semi-solid character of the preparation has been a decided objection. In such cases the liquid extract would seem to be the very preparation desired.

PHILADELPHIA MEDICAL ITEMS.

During the last five years the Medico-Chirurgical College which was chartered by the Legislature in 1850, has been located at the south-west corner of Broad and Market streets. The needs of this rapidly developing institution have outgrown its present quarters, and for some time the trustees have been looking for more commodious buildings. Recently they concluded the purchase of a large property on Cherry street near Logan square. The location is most excellent for the intended purpose; being near the centre of the city and yet sufficiently retired to give students and hospital patients the requisite quietude. The lot is 134 feet square. It is partly occupied by two large and substantial brick buildings, three stories high with good light on all sides.

Extensive alterations will be made, including the construction of an amphitheatre, clinical lecture room, laboratories and dissecting room, besides all the departments of a well appointed hospital. The lecture room will be fitted up with an eye to the comfort of the students, individual chairs replacing the benches usually supplied. The rooms for practical work will have all their fittings of the latest and most approved pattern. The hospital wards will overlook and have easy access to the large garden attached. Plans for the alterations are now being prepared by the architect, and when finished the corporation will have

one of the most complete college buildings in the country.

Within the ample bounds of the newly-acquired property will be located the following institutions:

1. The Medico-Chirurgical College, founded in 1850.

2. The Medico-Chirurgical Hospital, chartered in 1882.

3. The Philadelphia Dental College, now at 10th and Arch streets.

4. The Hospital of Oral Surgery, whose clinics have no rival in that specialty, has coalesced with the Medico-Chirurgical Hospital.

5. The Philadelphia Hospital for skin diseases, now at 923 Locust street, which will also be continued at a department of the above-named institution.

The grouping of several institutions with allied objects in a single organization is a new feature in the history of Philadelphia Medical Charities. The old simile of a fagot in a bundle of sticks is most opposite here. While each retains its individuality and independence of action, the union permits each to assist the others and, by avoiding duplicate expenses, enables the authorities of each to accomplish more with the funds at their disposal.

Several notable changes have lately taken place in the Faculty of the Medico-Chirurgical College

Prof. Wm. H. Pancoast who for 27 years has been teaching anatomy at the Jefferson Medical College has resigned his professorship in that institution and has accepted the same chair in the Medico-Chirurgical College to which he was elected by the trustees. He brings with him the extensive Anatomical Museum collected by himself and his father, which for so many years was employed in teaching the classes at the Jefferson College.

Dr. John V. Shoemaker, lately Lecturer on Dermatology, and teacher of Skin Diseases, in the Post Graduate Course at the Jefferson College, has become Professor of Dermatology, at the Medico-Chirurgical.

Dr. E. E. Montgomery, Obstetrician to the Philadelphia Hospital and Surgeon to the Women's Hospital, has been elected Professor of Gynecology.

Some other changes of interest to those who wish the old-time reputation of Philadelphia as a Medical Centre to be maintained will be found in the annual announcement of the Medico-Chirurgical College, which will soon be published.

CORRESPONDENCE.

When I landed on the sacred soil of Great Britain I expected among other things to find professional advertising a *rara avis* among the respectable class of medical men, but I have been somewhat disappointed. At least it was certainly unfortunate that in the first town where I inquired into the status of the profession (Mallow, in the South of Ireland) I should run across a printed circular setting forth the qualifications prizes, testimonials, etc., of which one of the principal doctors in the neighborhood was stated to be the happy possessor.

Nor is that sort of thing confined to the smaller towns of Ireland. It is not an uncommon thing even in Dublin and London to encounter magnificent door-plates setting forth the qualifications of the owners, and within a stone's throw of my lodging house a "D. Sc and M.R.C.S." sign on the door of a very respectable surgeon can easily be read half way across the square upon which it fronts.

I am told that competition reaches a height of which we know nothing in America, and yet it seems to me that neither Surgeon nor Physician is as tied down here as in Canada. If it be more difficult to acquire a practice in the larger centres here it is easier to manage and control it when once obtained. This is evident from the way in which a practice may bought and sold—a thing which cannot be done in Canada. And certainly it does argue well for the confidence which the public here entertain for the profession when they allow their right to choose their medical attendant to be bought and sold in this way.

I had a practical experience of the institution called "Hospital Saturday" in Belfast. On the afternoon and evening of a recent Saturday young girls were stationed on the principal street corners of that city soliciting aid for this charity. It was a sort of open-air bazaar, except that one got nothing but a smile for the cash, which, unless he desires to consider himself a "brute," was certain to be transferred from one's pocket to the basket of the fair one who stood in the way of the passer-by.

Here in London they reach the sinner's pocket through the medium of the churches, leading an outsider to imagine either that religious fervor is a more potent opener of the purse-string than it

is in Belfast, or that it is a more feasible plan. Hospital Sunday last year yielded £35,000, a sum which, as Cardinal Manning said in a recent speech, is very small when the numbers and wealth of the donors and the importance of the objectare considered. The meeting lately held at the Mansion House was for the purpose of devising some plan whereby the amount of subscriptions and contributions could be increased. Mr. B. Carter on behalf of the medical profession explained that there were over 100 hospitals and dispensaries in the city, most of which were dependent entirely upon voluntary contributions, and the science of medicine and surgery was largely the result of studies pursued within the walls of these institutions. In fact, said Mr. Carter, there would be no science of medicine without hospitals, and even if patients did not come to them voluntarily it would be a good investment if the community were to pay them for coming.

I quite fell in love with the Edinburgh Royal Infirmary. It reminds me, in point of situation, ventilation and general arrangement, of the Boston City Hospital. It has one of the largest and best-lighted operating theatres that I have yet seen and taken altogether, is a model hospital for patient, teacher and pupil. They tell me that the service of the Infirmary is very largely attended.

In Dublin the Rotunda is the centre of interest for the medical man, but I was attracted more by the museums of the Royal College and of Trinity College.

If they had a good catalogue available to the student, I think they would favorably compare with the average school museum of the London Hospital.

The central object of interest to medical men visiting Dublin is the Rotunda or Lying-in-Hospital. The building is circular, and by no means new. Every thing about the building is clean, and arranged so that the antiseptic treatment of accouchments can be thoroughly carried out. Solutions of carbolic acid and corrosive sublimate are freely used, and the results are manifested in the small number of deaths occurring in the practice of the hospital.

A goodly number of Canadian students and graduates are here, either on pleasure or for purposes of study. Among the latter I may mention Drs. McDonnell, Stewart, Dawson, McConnell, De Cow, Armstrong and Finlay, of Montreal, with Dr. Fulton of Toronto, Allan, of Vermont, Miner, of London, and a number of others. In my next I hope to be able to say something about the various hospitals here, the men that attend them, and the impression which they made upon me. That is unless the festivities of the "season" and the chances for dissipation which it is just now the fashion to offer so freely to Colonials does not render me incapable of calm judgment.

C. A. W.

LONDON, June 21st, 1886.

NEW APPLICATION OF IODOFORM.

Dr. Richmond, of Greenock, Scotland, writes to say that he has cured a very severe case of diphtheria by means of iodoform only. It was applied to the patches on the palate and the fauces (with a camel-hair pencil moistened with mucilage) three times a day. The child also inhaled vapor of iodoform whenever he shewed croupy dyspnæa breathing, and was invariably relieved by it. The vapor was produced at the *lowest possible temperature*, so as not to change its chemical properties. The child was unable to swallow for two days previous to being seen by the Doctor, and within half an hour of the application of the iodoform he was able to take a drink of milk and afterwards continued to drink with ease. The tongue became clear, and remained so. The child got three teeth during his illness (which lasted thirteen days), and was slightly salivated towards the termination of the complaint. However, the salivation was little more than might take place in a perfectly healthy child, in teething. He never fevered, the muscular nerve twigs were not affected, consequently had no paralytic symptoms, and is now in good health.

Dr. Richmond has also been using iodoform with marked benefit in the treatment of various other complaints, viz., phthisis, erysipelas, herpes, burns, scalds, etc.

The phthisical patients inhale it frequently during the day, and all express themselves as having received general benefit. The Doctor thinks the magic power of the iodoform chiefly consists in its sedative properties acting on the inflamed nerves and their twigs. It has arrested tissue destruction at a stage that former experience would have said was impossible.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, AUGUST, 1886. No. 11.

CONTENTS.

ORIGINAL COMMUNICATIONS.

Report of the Etiology, and the Preventive Vaccination of Yellow Fever 577
Clinical Lecture 579
Hœmoptysis 579
Myalgia 581
Canada Medical Association—President's Address 583

SOCIETY PROCEEDINGS.

Medico-Chirurgical Society of Montreal 589
Canadian Medical Association 595

PROGRESS OF SCIENCE.

The Treatment of Otorrhœa 601
Prusitus Vulva 601
Hydrochlorate of Cocaine in the Vomiting of Pregnancy 602
The Treatment of Sick Headache 602
Prescription for Alopecia 602
Another Treatment for Vomiting of Pregnancy 602

EDITORIAL.

Canadian Medical Association 602
Yellow Fever and its Prevention 603

Original Communications.

(WRITTEN FOR THE CANADA MEDICAL RECORD.)

REPORT ON THE ETIOLOGY, AND THE PREVENTIVE VACCINATION OF YELLOW FEVER.

By DR. L. GERERD.

Late Surgeon to the Interoceanic Canal Company at Panama, S. A.

Translated from the French by Dr. Wolfred Nelson, late of Panama, S. A.

Whence comes yellow fever, how does it propagate itself, and what is our etiological knowledge of its nature? Can that knowledge produce some prophylactic means or measures, easy to apply and sufficient to give absolute protection against this formidable plague?

Such were the problems that I had undertaken to solve after my arrival on the Isthmus of Panama. I shall now briefly give the results of my experiments and studies:

I.

In the month of June, 1882, in a report to the Superior Agent of the Interoceanic Canal Company resident in the City of Panama, S. A., I had the honor to inform him, that I had found in the blood of yellow-fever patients, some microscopic organisms,—some filiform, others resembling a string of beads (*chaplets*), and, lastly, brilliant little bodies. That the organisms were constant in appearance, and could thus serve as elements for diagnosis.

After some trials and a great many failures I succeeded in isolating the microbes, and obtained them in great quantity without the human body, by artificial cultivation, in liquids suitable for their nutrition and reproduction.

I was then enabled to study the mode of existence of the microbes. If one observes the filiform bodies attentively for a given time he perceives in their transparent and homogeneous substance, a series of small corpuscles, that refract light more than the other parts of the microbe. Little by little these corpuscles arrange themselves around a central axis or core, giving the organism the appearance of a string of beads (*chaplet*. This French word signifies the string of beads "told" by devout Catholics while praying). Soon other changes follow, the string-like formation separates and in place thereof nothing remains but a mass of brilliant little points. The size of little points is about the thousandth of a millimetre. These corpuscle germs have great resistance. *They do not perish by drying, and can after many years serve to propagate the disease, by regenerating the filiform bodies, when placed under favorable conditions.*

But what *rôle* can we attribute to the microbes in the production of yellow fever? To elucidate this question I have had recourse to experiments on animals. At the beginning of my work I experimented on a number of rabbits, later with dogs, poultry, rats and monkeys, but these animals did not show any predisposition to the disease.

At length a result was obtained by inoculating a guinea pig with half a *gramme* (a *gramme* is equal to 15 1-3 grains) of blood taken from the heart of a man an hour after his death from speific yellow fever. The animal sickened and after two days' fever died in great agony.

At the autopsy on the little cadaver, I found the characteristic lesions of yellow fever, shown with sufficient clearness to establish the identity of the disease, notwithstanding the difference in the organisms.

These direct inoculation experiments were repeated a great many times, the same results were produced in nine cases out of ten. The cadaveric lesions were always the same.

Examinations of blood taken from the ears of a guinea pig suffering from the disease invariably gave the same results, *i.e.*, the recognition or presence of the same microbe met with in man suffering from specific yellow fever.

Having thus established that yellow fever was transferable by inoculation, or vaccination from man to the guinea pig, it became easier to study the *rôle* of the microbe itself in the production of the disease.

More animals were inoculated with the culture liquids peopled with the microbes. They all died in the same manner, presenting the same symptoms as those infected by the direct inoculation of blood.

The periods of incubation in the various experiments declared themselves with varying phases in from one to nineteen days. Figures that correspond with those resulting from observation of the disease at Panama.

As a whole, the knowledge acquired by the experiments just related may be summarized thus:

1st. Yellow fever is a disease that is always characterized by the presence in the blood of the patients of a special microbe, which can be multiplied outside of the bodies of men or animals, by artificial culture.

2nd. The microbes give birth to germs endowed with great resistance to destructive causes, and are capable of reproducing the disease.

3rd. Yellow fever can be transmitted to a guinea pig by the inoculation of blood in its sub-cellular tissues.

4th. Finally, the animals inoculated with cultures charged with the parasites, contract yellow fever and die. Post-mortem, the same lesions are found as in those directly inoculated with blood.

II.

Vaccination.

"In 1880 M. Pasteur discovered the first in-
"stance of a disease, produced by a special mi-
"crobe, which, by special treatment, could be de-
"prived of a part of its virulence, and that fowls
"could be inoculated with it, without danger. By
"using the attenuated virus, the disease could be
"communicated to fowls, and after a light attack
"they were protected against the fatal disease.

"Later, several microbic diseases were recog
"nized or defined. Their microbes having the
"same properties.

"M. Pasteur, with marvelous sagacity, could not
"help but remark that the process which had ena-
"bled him to lessen or attenuate the action of the
"microbe of chicken cholera, ought to be a pro-
"cess of diminishing or attenuating the virulence
"of microbes generally that cause other diseases."*

Such were the antecedents that encouraged one to search out a method for attenuating the microbe of yellow fever. In my experiments already related I noticed that three of the inoculated animals that were dangerously ill recovered. That circumstance permitted me to submit to experimental proof, the important theoretical problem, as to whether they were still susceptible to the yellow fever poison. The three guinea pigs were re-inoculated some time afterwards to demonstrate if they were susceptible to the disease *de novo*. They did not present any abnormal symptoms after the inoculation, nor the slightest elevation of temperature.

Thus, we should admit in principle that yellow fever cannot be taken anew. And in this again the experiments were in perfect accord with clinical observations.

This fact accepted rendered my later experiments perfectly legitimate in the alternation of the virus of yellow fever poison for the production of a vaccine-virus capable of protecting man against the terrible effects of the disease.

The problem, thus stated, to me seemed susceptible of receiving a favorable solution by following in the steps traced out with so much perfection by M. Pasteur, in his search for the virus of charbon or malignant pustule.

This *savant* showed that he easily could obtain microbes of various degrees of virulence. From the deadly virulence, that is to say, that killed one hundred times in a hundred the animals experimented upon, such as guinea pigs, rabbits and sheep, passing thence by a number of intermediate steps down to the most inoffensive attenuation of the virus. The method of preparing this atten-

* Chamberland de la Vacination Charbonneuse.

uated or lessened virus thus becomes one of marvelous simplicity.

My conjectures were confirmed by experiment, and now, after the usual experiments, trials and inevitable reverses, I have obtained the microbe of yellow fever in different degrees of attenuation which can be reproduced indefinitely by cultivation.

A guinea pig inoculated by this attenuated virus not only runs no danger of death from the inoculation itself but is placed beyond the dangers and death that invariably follows the injection of virulent blood in animals that have not been protected by the preventive vaccination, or inoculation.

The illustrous savant whose methods I have followed said: "We now possess some virus-vac-"cine from charbon, capable of protecting against "that fatal disease without being fatal in itself, a "living vaccine, cultivated at will, transportable "everywhere, without alteration, at length pre-"pared by a method that we may believe suscepti-"ble of generalization."

I shall now apply his words to yellow fever, and it remained for me to carry my experiments from the animal to man.

The experiment was made last week on myself. Some months ago I was inoculated with an extremely attenuated culture. Fifteen days ago by a second and stronger culture, and, finally, guided by special reasons, I allowed myself to be bitten by mosquitoes that had just bitten a man suffering from specific yellow fever. He was in the fifth day of the disease.

In view of my experiments it became easy to analyse what obtains in the human body, inoculated, as I was, with a virulence of maximum intensity, direct from the body of a patient.

Twenty-four hours after the above direct inoculation I felt sudden pains in the regions of the kidneys, a feeling of bruising or soreness in all my extremities, a sensation of tearing in my eyeballs. Two hours after these first sensations my temperature was taken in the mouth and was found to be 39° C. (36 9-10° centigrade being equal to 98½° Fahrenheit). That evening it was 40° C. The next morning also 40° C. That evening 39° C. and on the morning of the 3rd day 39°. Then it kept falling to normal.

Tongue creamy white, gums bleeding, the amount of urine was diminished by one-third. On the fourth day I had got back to my normal condition.

Thus, the preventive inoculation of yellow fever is proven. This was what I had been searching for, a virus capable of transmitting a mild type of the fever without danger.

The first step, the most difficult and the most laborious, because it was filled with the uncertainty of unknown factors, was over. The rest will surely follow in time.

A number of courageous friends having full confidence in the method, and who fully understood the importance of the experiments, and their great utility for mankind, have declared themselves ready to be vaccinated by me. I shall vaccinate them soon, with all the care that such a serious matter requires, and with all the precautions exacted by rigorous experiments.

In conclusion, I may add that the theoretical question of the preventive vaccination of yellow fever is thus solved. The practical question has now entered on a course of experimentation, and promises to be a fact and a safeguard to mankind.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, February 23rd, 1886.

By Francis W. Campbell, A.M., M.D., L.R.C.P.L.

(Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College).

HÆMOPTYSIS.

The patient now before us came to the out-door room on last Thursday complaining of having, during the previous night, spat up blood, and in proof of her assertion brought with her, in a small vessel, holding about an ounce, almost that quantity of expectoration which consisted principally of blood. Mr. Charles Vidal took her history which is as follows :—

"Catherine Murphy, aged 41, comes to hospital complaining of a hard dry cough, with spitting of blood at intervals. Pain under left breast and choking sensation before attack occurs, knows nothing about her grand-parents. Her father is alive and comparatively well, but last summer was in the hospital laid up with dropsy. Her mother died suddenly of heart disease. Her brothers and sisters are alive and well, with the exception of one sister who died of CONSUMPTION. Up to two years ago she was perfectly healthy, never being troubled with sickness of any kind, and being remarkably healthy as a child. After her marriage her health continued perfectly good; has had several children,

and was generally up the second day after confinement. About two years ago, while nursing her child, and being rather exposed to draughts, she caught a severe cold. She took a warm bath and hot drink and went to bed almost immediately. Next morning, when getting up, she fainted. Since then she has never regained her health. The cold was shortly succeeded by a dry, hard cough, which she was unable to get rid of. About three months after this first attack she coughed up about a tablespoonful of blood. The cough began in the ordinary manner, but instead of bringing up a harsh yellow expectoration she coughed up blood. After this up to the present time, at intervals varying from 3 to 4 months, she has these attacks occurring, and she will cough blood about 6 or 8 times during 24 hours. Between the attacks she is troubled with the cough. Before each attack she experiences a dull pain, succeeded by a sharp darting one under the left breast, and a feeling of general oppression over the chest.

THE PRESENT ATTACK occurred on Wednesday last. The blood coughed up is of a bright red color, intermingled with minute bubbles of air. During Wednesday night she brought away a large quantity, but was unable to secure it."

I placed her on a mixture containing Vinum Ipecac and Tinct. of Ergot, and whether due to the medicine or to nature, her cough is somewhat easier, and the expectoration of blood has ceased. The quantity which this patient has at any time passed has not been large, and the probability is that the present attack would have been slight even without any medicine having been given to stop the flow. There is, so far as the report shows, no history of heredity of consumption, although one sister, she admits, died of this disease. If we could get the history of the grand-parents and their relations it is more than probable that in some branch of the family a phthisical tendency would be discovered—for it is a well recognized fact that a hereditary tendency to many diseases passes over one, sometimes two generations—only to re-appear in the next. Upon examination of this woman's chest we will find decided dullness in the left infra-clavicular space with diminished or weakened vesicular murmur while posteriorly, immediately below the angle of the left scapulæ—and covering a small space there are distinct mucus rals. The other portions of the lung, indicate a feeble organ while the right is so far in a healthy condition. The history of the case shows that the exciting cause was a cold caught while exposed to a draught, and that this cold she has been unable to throw off. Her general condition seems fairly good, and there is one sign about her case which is favorable, *i. e.*, that her general nutrition is excellent, and that there is no marked activity in the disease. From the small quantity of blood she has brought up on each occasion I infer that the spot of softening is limited, and that the vessels which have opened from the breaking down of tissue have also been small.

When called to a case of this kind you have to decide as to whether the blood comes from the stomach, post nares, the mouth or fauces. If it comes from the stomach, it will be ejected by vomiting and will be mixed with food. It will give an acid reaction, whereas pure blood is alkaline. It usually also has a blackish color from the action of the gastric juice. If it comes from the posterior nares, it is in the form of dark solid sputa, which are removed by hawking. An inspection will show you whether it comes from the mouth and fauces. It is coughed up, when it comes from the air passages, it is felt in the larynx and trachen, and is ejected with but little effort. In color it is bright red and contains bubbles of air, as did the blood brought up by this patient. The amount brought up varies from a teaspoonful to one or two pints, the average is a few ounces. It may last only a few minutes, when the amount coming up gradually ceases, but for several days the expectoration is tinged with blood. Death rarely takes place during an attack, but it does sometimes. A patient may only have one attack; when this is the case, it is generally found that nature has taken this method of relieving a congestion of a portion of a lung. When it repeatedly occurs, at longer or shorter intervals, it is looked upon generally as indicating a serious condition of the lungs, though, I must say that an experience of over twenty years, has lead me not to take a too serious view of an hæmoptysis, unless there are other indications of a rapid softening of pulmonic tissue.

If hæmoptysis is large, suspect an aneurism unless the patient is in advanced phthisis; an aneurism sometimes eats its way into the bronchial tubes, and is thus discharged; an attack of hæmoptysis generally causes much alarm. The patient is nervous and agitated. Your first duty is to reassure the patient, 1st, that there is no immediate danger, and a possibility of a complete recovery.

Tell him that you have had more than one patient who has had repeated attacks, and who is still hale and hearty.

Treatment.—If patient is plethoric, may bleed, rarely required, but I would not hesitate to make use of the lancet, in a robust man with a full, strong, and bounding pulse.

If it is a large hæmoptysis and is persistent, cold to the chest. This is done with compresses, wet with iced water, or even with ether, which evaporates rapidly, *ice* itself recommended. Flint has used it with success, and no bad results. Revulsive measures as sinapisms, foot-baths and dry cupping to front and back of chest. Ligatures around the extremities to limit amount of blood returning to the heart. Common salt is the popular remedy, and is generally administered at once, before the arrival of a physician. It has but little value, nevertheless it continues to hold the mind of the public. It at all events makes the patient feel satisfied that something is being done for him. Quiet, rest in bed, voice restrained, room cool, head and shoulders raised, diet bland, drinks cool or cold. If the patient coughs, he should have an andyne cough mixture.

Plumbi acetate :—Galle Acid and opium, tannin, karameria are recommended.

Ergot in form of pill, 3 grs. every 4 hours; ergotine injected hypodermically is a good remedy, also ice to suck.

Tinct. digitalis as a vascular sedative; alum and dilute sulph. acid are useful.

Turpertine, saline aperients useful in Plethoric cases.

MYALGIA.

A very large proportion of cases, in which pain is the principal symptom, are due to myalgia. This disease is a morbid condition of the voluntary muscles of which the chief and often the only symptom is pain on movement. It is sometimes called myodynia. It has no essential relation to rheumatism or the rheumatic diasthesis. To use the common expression "muscular rheumatism," is not correct. This error has caused much confusion of thought, and tends to maintain the obscurity which hangs over rheumatic affections in general.

As manifested in particular muscles or groups of muscles, myalgia is described as cephalodynia, torticollis (myalgia cervicalis) pleurodynia (myalgia pectoralis *vel* inter costalis) lumbago (myalgia lumbalis) dorsodynia, scapulo-dynia (myalgia dorsalis).

It is described in few text books. It is essentially pain produced in a muscle which is obliged to work, when its structure is imperfectly nourished or impaired by disease. Hence all influences which unfavorably affect the nutrition of the muscles, all diseases which directly affect the integrity of their structure predisposes to this affection. The defect in nutrition may be only relative to the amount of work the muscles is called upon to do, or there may be absolute mal-nutrition implicating the whole body. The muscles may be impaired by local disease which affects it alone, or it may share in morbid processes which also involve other and distant structures. Sedentary occupations leading as they do, to poor nutrition of the muscular system, from want of proper use and exercise.

Malnutrition from a diet deficient in amount, defective in kind, or in childhood from too rapid growth, the chronic wasting diseases, the state of convalescence from acute disease, and finally, degenerative diseases of the muscles themselves, all favor the development of myalgia. Among the acute maladies, which by their derangement of nutritive processes, especially render those who have suffered from them, liable to this painful affection of the muscles during convalescence, is acute articular rheumatism. It is this fact that has given rise to the view, that the muscles share with the serous and fibrous structures in the lesions of that disease and, therefore, that myalgia is rheumatism of the muscles.

Over and above these defects in nutrition, there is an especial predisposition or idiosyncrasy, the nature of which is unknown, which render certain persons, far more liable than others, to suffer from myalgic pains. This predisposition is met with in those who have inherited or acquired a gouty taint, and in those who are perfectly free from this taint. It is not associated with any special liability to true rheumatism. The most common exciting cause, is overwork, pure and simple; especially overwork which brings into prolonged and excessive exercise, unaccustomed muscles. Next in frequency is exposure to cold, especially to damp cold, when over-heated or fatigued; finally, inevitable and incessant contractions, such as are physiological and are performed without consciousness, or sensation in a healthy state of the muscles will, in muscles that are defectively nourished, or have undergone fatty, granular, or fibroid degeneration, cause more or less distinct myalgia.

As examples of myalgia, due to overwork, pure and simple, is the pain experienced in the adductors of the thigh, after a ride on horseback, when out of practice; the pain in the epigastric region, which is met with in children who have a persistent and troublesome cough. This is well seen in children who have measles; also the pain of spasm, particularly that which follows tonic spasm, such as occurs from reflex causes, as cramps in the calves of the legs at night, and in bathers. Many of the pains, which are met with during the growing period of our existence, and which are called "growing pains," are myalgic in their character. Examples of the disease, the result of exposure to cold, are seen in the pains of what is commonly called "*wry-neck*" or "lumbago." These are both met with in persons perfectly healthy, but, who being very tired, fall asleep in a current of cool air. This form of the disease is also often met with among "plumbers" who, during very hot weather, have to enter and work in cellars, whose atmosphere is chilly and damp. Here they often are compelled to assume strange and awkward positions, putting certain groups of muscles into excessive action for a time, thus materially assisting the local, or more properly, the atmospheric cause, in inducing myalgia.

Examples due to defective nutrition of muscles are very common in the flying or fixed muscular soreness met with in chronic wasting diseases, and in the convalescence from acute diseases, when muscular exertion is commenced too soon. Certain forms of præcordial pain, which are met with in degenerative lesions of the muscular substance of the heart, are evidently of a myalgic character. The symptom which is common to all cases is pain, it is sometimes constant, especially in acute cases. More often it is slight or absent when the patient is at rest, with the affected muscles in full extension. Calling the muscles into action, always aggravates it. The pain is felt all through the muscular mss, but is most intense at or near its tendinous insertion. In character it is stabbing or stitch like, sometimes dragging or tearing. At others it is a simple soreness, as if the part was bruised. In chronic cases, it is almost invariably accompanied by stiffening of the muscles, and this is occasionally met with also in acute cases. The difference in the character and severity of the pain is due to difference in the opportunity for physiological rest in different groups of muscles. The most obstinate and severe form of myalgia is that of the intercostal muscles, and their fibrous aponeurosis, generally known under the name of pleurodynia. Here the affected muscles are constantly concerned in the respiratory movements, and have but the briefest possible period for physiological rest, simply the brief internal, between the end of expiration and the commencement of inspection. Scarcely less stubborn and severe are the myalgias of the great muscles of which the principal function is to maintain the erect position of the head and trunk. Less painful and of short duration are the myalgias of the limbs; less painful because prolonged intervals of absolute rest may be voluntarily secured; of shorter duration because it is by rest, that the balance of nutrition is most speedily restored. Over the myalgic area some degree of tenderness usually exists. It is generally slight, except at the region of tendiness insertion where it often alone is felt. It is not associated with cutaneous hyperasthesia. As a rule, spasm does not exist in acute cases, except when the muscles are brought into use. In chronic cases, there is generally a condition of tonic spasm, a spastic rigidity. There is at times a loss of contractile power, and with it is associated some degree of atrophy. Objective signs are absent, except that the patient assumes by preference, an attitude of repose, and keeps, as much as possible, the structures which are involved, at rest. There is no pyrexia or fever; the appetite is good, and digestion seems not to be interfered with. There is not, as there is in rheumatism, acid perspiration. The urine is normal. There is no tendency to either pericardial or endocardial inflammation. There is little or no constitutional disturbance. If any is present it is slight, and is due to prolonged local suffering, and want of rest. Generally, with the exception of local pain, the patient remains in his usual health. Myalgia may affect the voluntary and occasionally the involuntary muscles of any part of the body. Those most generally attacked are those subject to continuous and excessive work. The aching dragging pain in the back of the neck, so frequent in poorly nourished nervous women, and in other cases of neurasthenia, the so-called pain of nervous exhaustion, is myalgic. It is felt principally during fatigue, and in the erect posture. Almost always it is relieved by lying down. It is referred, sometimes, to the base of the skull, sometimes to the back of the neck, but most often to the spinal region, just above the level of the upper border of the scapulæ. It is a very

harassing symptom. Many of the pains of that condition known as spinal irritation are myalgic. Acute myalgia is generally brief in duration—from a few hours to a few days. The chronic is indefinite in duration, from a few months to a life time. This variety has its periods of exacerbations and remissions, which are much influenced by change of temperature, and the different phases of the weather. The pathology is obscure. It is not rheumatic, although at times the two conditions do exist together. Such relationship is accidental, not casual. It does not resemble neuralgia. It is believed to be of the nature of a sub-inflammatory process within the muscle substance. The not uncommon instance in which an injury or contusion has been followed, shortly after recovery, by severe myalgia, would go to prove this theory.

The indications for treatment are three: (1) relieve pain. (2) Physiological rest for the affected muscle. (3) Restoration of the balance between the nutrition of the muscle and the work which it has to perform. 1. Relief of pain. This may often be secured by rest in a position that permits the complete relaxation of the muscles involved. In acute cases, due to overwork, little more than complete rest is required, a few hours sometimes, or at most a few days, and muscular contractions are once more painless; when this complete muscular relaxation is impossible, or fails to give relief, anodynes are required. Morphia injected under the skin by means of the hypodermic syringe, at first ¼ of a grain, combined with the $\frac{1}{100}$ of a grain of Sulphate of Atropia. If relief does not follow the first injection in 6 hours, a ¼ of a grain of Morphia with the same quantity of Atropia as was given at first, viz., $\frac{1}{100}$ of a grain. The continuous application of dry or moist heat by means of hot water bags, flannels, poultices, and spongio-piline is also useful. Anodyne liniments also do good. Soap liniment, containing aconite, Tr. opii, belladonna, chloroform or chloral, are useful. The compound belladonna liniment of the B.P. sometimes gives excellent results. Emplastrums or plasters of Belladonna, Opium, Conium and Menthol are recommended. Galvanism sometimes gives prompt relief. The pain gives way often under gentle and long continued massage.

(2) *Rest* is enforced on the patient by the intensity of the pain which movement causes so that in severe cases rest in bed becomes a necessity. When the respiratory muscles are affected, it is advisable to make an attempt to limit their movements. This is done by means of overlapping strips of adhesive plaster drawn from the spine downward and forward in the direction of the ribs to the medium line in front. Such a dressing gives much comfort. It is advisable at times also to support these muscles by a bandage tightly wound around the chest.

(3) The balance of nutrition is restored by rest. Local means to further this end, are such as relieve pain viz., heat, anodyne and stimulating liniments, massage and galvanism. The parts must be protected from sudden changes in temperature by extra flannel, sheets of wool, or cotton batting, covered, if necessary, with a piece of oiled silk or gutta percha tissue. In such cases prolonged massage, with passive movements, and the slowly interrupted galvanic current, alternating with rapid faradic currents, now and again show good results. Ten grains of Overs powder or pulv. ipecac co. at bedtime and a mild purge, saline the best—in the morning. In gouty or plethoric persons, purgation is called for, and the Turkish Bath is also useful in the same class of persons, in Anemic subjects, Quinine, Iron, Lime, and C.L.O., are useful.

If the attack linger, full doses of Chloride of Ammonium, and in old cases, iodide of potash in moderate doses, should be given well diluted and continued for a lengthened period. In stubborn cases Anstie recommended deep accupuncture of the muscle near its tendinous attachment. When the general nutrition is poor the local trouble is apt to be obstinate and often only yields to measures which restore the general health.

CANADA MEDICAL ASSOCIATION.—PRESIDENT'S ADDRESS.

The President's Address, delivered before the Canadian Medical Association, at its nineteenth annual meeting, held in the city of Quebec, onthe 18th August, 1886, by T. K. Holmes, M.D., Chatham, Ont.

Gentlemen of the Canadian Medical Association.—When, a year ago, you paid me the high honor of electing me to the presidency of this Association, I will not pretend to deny that the distinction that appointment conferred afforded me the most lively gratification, which, however, was qualified by several considerations that were to me of quite a serious character. Not the least of these was the knowledge that I must address an audience distinguished for intelligence and for scholarly attainments, both professional and general, and

that the learning and ability of my predecessors in office would not detract from the difficulty of the task. Indeed I felt, and still feel, that my chief qualification for the position in which your kindness has placed me is an unswerving interest in the prosperity of this Association, which has influenced so strongly and so favorably the medical profession of this country. While expressing my most sincere thanks for the highest honor at your disposal, I feel sure that the same kindly feeling which prompted its bestowal will render easy the duties of presiding officer, and that the same zeal which has hitherto marked the scientific work of this Association will characterize the meeting now convened.

Romance and history combine to render the city of Quebec the most interesting spot in Canada, and our Association may well be congratulated on the privilege it enjoys this year in holding its session in a place rendered famous by so many circumstances. The adventurous quest and the indomitable will of the early navigators, who laid the foundation of civilization in the country when they planted the colors of France along the shores of the St. Lawrence, may well serve us as models for emulation in our more peaceful search after that scientific knowledge which contributes so much to the happiness of mankind. If our efforts be at all comparable to theirs, equal honors and equal blessings may be expected to result from our endeavors. In this connection I may expres, the wish that the same spirit of enlightenment and progress that characterizes our parent countries, France and England, may animate their descendants in this young Dominion, and that the Canadian profession of medicine may not be unworthy the great names of Harvey and Lawrence, of Hunter and Pasteur. It will certainly contribute greatly to the progress of medical science in this country if the two races whose ancestors have led the van in Europe go hand in hand and vie with each other in creating a professional status here inferior to that of no other country. Some of the means by which we may hope to accomplish this will be the subject of my remarks to-day.

The architect who aims at lasting fame not only lays broad and deep the foundations of his work, but anticipates each step in the growing structure, even to the crowning event of its completion. He selects the material, superintends each process of manufacture, shapes every part, and embellishes the whole, until it rises in symmetry and perfection, and stands the glorious and enduring monument of his creative genius. In this land there is arising a temple whose foundation is based upon the accumulated labors of some of the greatest architects of human happiness. Their names shine with brilliancy unabated all down through the vista of past years, and animate and enlighten all who labor in the same profession and emulate their achievements. We are the privileged architects of this temple of medicine in our country and generation, and I trust that the marks of our skill may not be indistinguishable in the rising edifice. The progress of scientific medicine in the recent past is the result very largely of the development of the science of biology which has done so much to establish medicine on a scientific basis.

Until the study of life in its elementary forms was rendered possible by modern instruments of precision, empiricism necessarily entered largely into all medical progress, and it was maintained as an opprobrium that medicine was no more than an enlightened empiricism. This is true but it could not have been otherwise, since until the birth of biology as a science, medical knowledge had either to remain at a standstill or to progress by a series of empirical jumps which sometimes left it in a more advanced state of usefulness, and sometimes failed to do so even in the slightest degree. Although empiricism in medicine has been such a laborious means of advancement, we must admit that it generally contained some grains of truth, and that when it failed to accomplish what was expected of it, the reason of the failure lay, not in the worthlessness of the efforts at progress, but in the difficulty of separating the grains of truth from the abundant chaff in which it was contained. Each new fashion, while it has contained some truth, has failed and given place to another little in advance, not because it contained no truth but because the truth it did contain was incomplete. When, however, the study of biology was established on a scientific basis, medicine, which is but an applied science of biological doctrine, became less empirical and more scientific, and by the aid of physiology and pathology, which are the necessary sequence of biological investigation, has advanced to the present high and satisfactory position it occupies. The very fact that morbid processes are viewed and studied from a physiological standpoint and are estimated and measured by the laws that govern elementary processes of life renders it certain that the progress of the

recent past and of the present is on surer lines and firmer foundation than ever before, and that the future of medicine will be the glorious sequel of the present, as the present is the glorious sequel of the past. It justifies the belief that the advantages to the human race likely to accrue from the prosecution of medical studies and investigation pursued on these lines will be far greater in the future than in the past, that physiology and pathology, which are but in their infancy, are destined to illuminate the dark places in medicine and reveal the true cause of much human suffering and premature death.

We are accustomed to regard with wonder the achievements of modern invention in the art of war, and to contemplate with amazement the perfected instruments of destruction that strengthen the hands of modern belligerents, but the general who advances to battle with all these at his command has no greater advantage over a barbarous foe than modern medical searchers after truth in the realms of disease have over their empirical brothers of the prebiological period. Possessing these advantages, and stimulated by this prospect, it is reasonable to suppose there will, in the near future, arise men whose investigations, beginning where those of Sanderson, Koch, Virchow and Pasteur leave off, will be equally brilliant and equally conducive to human happiness and longevity. The country that produces these men will be the country that affords the best medical education to those entering the profession, and that most facilitates original investigations for those who have chosen that field of labor. No physician in this country, worthy of the profession to which he belongs, can be indifferent to the position Canada shall occupy in the honorable and honored competition in which so many are and will be engaged.

The future of the medical profession in this as in any other country will largely depend upon the natural ability and the mental and moral training in childhood and youth of those entering its ranks; so that in considering any scheme for the creation of a high standard of medical qualification, domestic training, and the plan of education pursued in public schools must be recognized as bearing an important part.

It has been said that poets are born and not made; a saying that is not unrtue when applied to medical men, for a combination of mental and moral qualities which cannot be wholly acquired, enters into the character of every great physician. It is cause for regret that greater discrimination is not exercised in directing young men in the choice of a business or profession, and that convenience and not natural aptitude should frequently determine a young man's course in life. There are so many examples of men rising from obscurity to great eminence in every vocation that there has arisen a popular impression that all obstacles and natural defects can be compensated for or can be overcome by diligence and perseverance on the part of any aspiring youth. It would be wrong to under-estimate the value of industry and high aspiration, but these, while they can improve all and can render mediocrity respectable, can never supply the place of genius. While it is impossible to create genius by any system of training, it is almost impossible to repress it altogether by any carelessness or neglect.

"That many mute inglorious Miltons lie buried in our church-yards, I venture to doubt: the fire of a Burns is not easily hidden under a bushel, but some smaller lights may be quenched, and the best of such men, like Burns himself, may be thwarted and broken in heart." (*Dr. Allbutt.*)

Other things being equal, the child, who from infancy is trained to think and to reason correctly and to express its thoughts clearly, will be more likely to attain eminence in mature life in all pursuits of an intellectual character than the child not so trained; indeed, skillful training in early life is essential to success in persons of average natural capacity, and is of unquestionable importance to all.

The efforts to establish, not to maintain an, efficient system of education in this country are worthy the highest commendation, but the task is a difficult one and there is danger of enthusiastic legislators over-stepping the work and making our sons and daughters mere receptacles of knowledge instead of creators of knowledge by failing to recognize that it is vastly more important that a man should think and reason correctly than that he be the professor of multitudes of facts and definitions. Physicians, with such questionable elementary training, are like the artificer well supplied with the tools of his craft, but lacking the skill to use them. It is not to such that we may look hopefully for real progress in our science; they make up the great army of routine practitioners who trouble themselves little with profundities, and are like Dr. Sangrado, who felt quite sure that those of his pa-

tients who, under the care of his pupil Gil Blas, died from excessive bleeding and the copius drinking of warm water, did so because his panacea was not applied with sufficient vigor and determination.

It is probably not incorrect to say that most medical men in Canada are of opinion that the chief defect in our school system lies in the oversight here referred to. The curriculum for medical matriculants in Canada must create a higher average intellectually among young men aspiring to the profession, but there can be no doubt that a widening of the curriculum, so as to embrace a more extensive knowledge of the natural sciences, would greatly facilitate the acquisition of knowledge presented to, and required of, medical students. An acquaintance with the laws relating to climatology would serve a useful end in the study of epidemic and endemic diseases, and in an estimate of the influence of climate on disease in general; an acquaintance with minute organism and histological structures, such as could be readily acquired in any high school provided with a microscope would prepare the mental soil for the reception and quick germination of the seeds of knowledge, sown by teachers of physiology and kindred subjects in medical schools. The medical student, who learns something of biology, of cells and germs, and of bacterial life only after he has entered upon his course of medical lectures, is at a great disadvantage, and loses much time in a bewildering effort to master names and technicalities,and I can conceive of no more irksome task for a teacher that to lecture to a class of young men laboring under this disadvantage.

The relations existing between medical schools and licensing bodies in this country are so satisfactory that little desire has been manifested to alter them, and it is beyond doubt that to these relations we owe, in great measure, the improved status of medical education here.

When the great discovery of Columbus opened to the old world the unknown and virgin resources of the new, the most progressive nations entered eagerly into keen competition for the advantages this discovery presented. National ambition and individual courage and endurance combined towards the great aim and object of colonization and development of natural resources in this continent. The results are patent to all; a newer and greater freedom and civilizations in the new world are the rich fruits of these vigorous pioneer efforts, and the evidence exists in the glad and prosperous millions of the western world. Analogous to this is the meteoric brilliancy of the discoveries in medical science within the past fifty years. Physiology, pathology, the etiology of disease, physiological medicine, preventive medicine, these are some of the fields laid open to the modern physician, and they leave no lack of opportunity for the exercise of ambition, skill, and philanthropy. Nearly all European nations and the individual States of the neighbouring Republic have shown their determination to participate in the honorable achievements in medicine, thus rendered possible in the near future. Schools for the pursuit of original investigation have been liberally endowed by these governments, and this liberality has been supplemented by the wise and princely donations of private individuals.

Sanderson and Klein, Koch and Pasteur, our own Osler, and many others scarcely less distinguished, are devoting their lives with indefatigable zeal to the elucidation of scientific questions upon which rests the superstructure of medical practice, and they are enable to do so only through the liberality of the various governments under which they live. Research of this kind can only be carried on successfully by men naturally adapted to such work, and who are free from the care and anxiety inseparable from the lives of those engaged in the active practice of their profession. Hence the absolute necessity for the endowment of institutions of this character. The large expenditure necessary to the equipment of a laboratory for such work has greatly retarded it in Canada, and until means are provided we must be content to occupy an insignificant place in the great race now being run. Can it be that this country or its wealthy citizens will remain indifferent in this matter, while our nearest neighbor is lavishing millions of dollars to attain honorable eminence in the progress of medical science? Scarcely a State in the Union that has not its well endowed university, and the princely gifts of Cornell, of John Hopkins, of Mr. Stanford, of Mr. Vanderbilt and of Sir Donald A. Smith are the great beginning of greater things. Who can estimate the blessings to the human race that must arise from the wise munificence of these noble men! Millions yet unborn shall speak their names with feelings of reverence and love, nor will other monuments be needed to make their names immortal. In this connection, I would suggest that a committee of this Association be appointed to report at the next annual meeting upon the best means

of establishing one or more laboratories, where original investigation in medicial studies may be carried on.

Medical societies constitute a most important factor in the advancement of medical knowledge, and it is much to be regretted that they are not everywhere established. It is safe to say that the maintenance of active local societies contributes immensely to the knowledge of their members by encouraging careful observations in private practice and more extensive reading and research. Aside from a scientific point of view, the harmony engendered by these meetings eliminates much of the jealousy and misunderstanding that are so humiliating and so subversive of individual happiness and public respect. The general organization of small local societies would be a sure means of improving the representations at the larger ones, and would secure to them papers and discussions of a higher character. Provision has been made in Ontario by the Medical Act for the formation of territorial associations in different electoral divisions, and in some of them most prosperous societies have existed for many years, and the reports of their proceedings constitute valuable additions to medical literature.

Of all the means of medical progress, few could be more advantageously utilized than the accumulated experience of men in private practice if they could be induced generally to keep a systematic record of their more important cases. Time, skill, and the privilege of post-mortem examinations are essential to the successful recording of cases, and their absence is doubtless the chief cause of neglect so universal in this matter. Time so consumed would be more than repaid by the increased skill acquired; the high standard of qualification now required of graduates should remove the second difficulty, and if requests for autopsies were made in all cases necessary to verify a diagnosis or to elucidate an obscurity, the prejudice now existing against them in the public mind would to a great degree disappear. Let rural practitioners who underrate their opportunities of contributing to the general fund of medical knowledge remember that Jenner, McDowell and Koch were not metropolitan physicians, and were unknown to fame until their great dicoveries, wrought out by diligent study and observation, placed them among the great benefactors of mankind. Observation and reflection are the parents of discovery, and never fail to produce their offspring, although the gestation may be long and the labor hard. Every truth so revealed is like a lantern, the light of which may be turned on the dark places of our field of investigation and new truths stand clear to our mental vision, and we talk boldly and safely on, using each new thought to illumine the obscurity that surrounds and precedes us.

The building up of a science is a slow and laborious process, and facts must be supplied by a multitude of workers. The scholar who deciphers the cuneifor inscriptions of ancient Babylon or the hieroglyphics of Egypt, and contributes to our knowledge of these nations, must be aided and preceded in his work by the archæologist who discovers and the laborer who unearths these imperishable records of past events. So in the building up of medical science, the humblest worker is not to be despised, for his contributions may be and often are essential; but to be available, his thoughts and observations must be recorded, that they may be weighed and winnowed by those suited to the task.

All who have read the lectures of Murchison on "Functional Diseases of the Liver," of Roberts on "The Digestive Ferments," or of our own Osler on "Malignant Endocarditis," must be impressed by the great impetus given to practical medicine by these, and will need no arguments to convince them of the desirability of the endowment of similar lectureships here. From a literary and scientific standpoint, the advantage accruing to the profession from such lectures would be important, but of even more importance would be the encouragement afforded to the more gifted and aspiring of our own Canadian physicians and surgeons. As Canadians we may feel proud of our country and of its physical and political excellencies, but we may rest assured that, so far as we, medical men, are concerned, others will estimate us by the reasonable and practical standard of our contributions to medical knowledge and by our scientific attainments. No conservative clinging to absolute methods on the one hand, or the multiplication of weak meretricious literature on the other, can impose upon the learned in the professional world, and the sooner we create strong incentives to scientific work the sooner will the workers be forthcoming. I would here offer the suggestion that this Association take into consideration the establishment of lectureships similar to those in England and other older countries.

Of all means enumerated for the advancement

of medical science, individual effort undoubtedly ranks first. Associations can teach and stimulate, but they can never supply the place of study and observation. Truth only yields her wealth to him who lays siege to her shrine. Emmerson says the hardest task in the world is to think. We try to look in the face an abstract truth, and we cannot do it. The mind swerves from the encounter, and thick darkness prevails. We return to the charge and try to force Truth from her citadel, and then in a moment, when we least expect it, a rift in the cloud comes, a ray penetrates our minds, light floods in more and more, until objects, dim at first from sudden light in dark places, become real shapes, and we guage their dimensions and estimate their proportions with unerring exactitude. Few truths are discovered but by this laborious process, and because we evolve them slowly and often only partially by delving beneath the surface of things, it is better to labor so than not to work at all, for when the surface is broken and disturbed others will see clearly what we only half perceive, others will perfect what we are able only to dimly outline.

It requires no prophetic eye to perceive the future greatness of Canada. Her vast extent and varied and inexhaustible natural resources everywhere abounding are such that it would seem impossible for any series of unfortunate events to stem her progress, or to divert her course in the contest of nations for pre-eminence in all that constitutes true greatness. The spirit of progress is abroad, armed with the all-compelling weapons of modern invention, hampered by no medieval absurdities, and thwarted by no ignorant prejudices; we are justified in entertaining the most exalted and hopeful view of the future of our country, and may deem ourselves fortunate in bearing a part in the development of so fair a heritage. As physicians, the part we assume is not an insignificant one. To enact wise laws, to encourage commerce, to preserve peace within our borders, and to command the respect of neighboring nations, are objects worthy the most exalted ambition and the most patriotic determination; but will it be said that the aims of medical science are less exalted or less conducive to national prosperity or individual happiness? To cure disease, to alleviate suffering, to extend the limit of human life, to enlarge the field of human usefulness, to be able to prevent disease by removing the cause; surely the profession that devotes its energies to the accomplishment of these objects is entitled to the fostering care of governments and to the liberty of wealthy citizens.

"A sound nation is a nation that is composed of sound human beings, healthy in body, strong of limb, true in word and deed, brave, temperate, sober, chaste, to whom morals are of more importance than wealth. It is to form characters of this kind that human beings are sent into the world, and those nations who succeed in doing it are those who have made their mark in history. They are nature's real freemen, and give to man's existence on this planet its real interest and value!" (*Froude.*) In the not-distant future this Dominion will be the home of fifty millions of people with all the wealth and all the greatness that implies a thought that might well inspire us with feelings of pride and satisfaction; but the wise man will not be so much impressed by the vastness of our territory, the multitude of our people or the size and wealth of our cities; but will be more concerned in the problem of the social advancement, the civil liberty, the physical perfection, the scientific status, and the moral rectitude of our teeming population. When that time comes may the science of medicine have contributed its share towards the creation of a people unsurpassed for physical perfection and mental sprightfulness, and for all those virtues that are born of these. Should these hopes be realized, then indeed would happiness prevail and prosperty sit as a ruling genius on the brow of every hill, the bosom of every lake and the bank of every stream; and the application to our country of the language of one of England's greatest poets would scarcely be considered hyperbolical, when he says:

> "All crimes shall cease and ancient fraud shall fail
> Returning justice lift aloft her scale,
> Peace, o'er the world her olive wand extend
> And white-robed innocence from heaven descend."

Dr. S. A. Defoe, of Washington, N. J., writes to the *Med. Record* that he has found the following to give excellent results in melancholia. ℞. Valerianates of zinc, quinine, and iron, each twenty grains, to be divided into twenty pills. One pill is to be taken three times a day before meals. The drugs should be absolutely pure. Dr. Defoe says he has tried this remedy thoroughly, and finds it a specific for the worry of nervous women and for incipient melancholia.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 14th, 1886.

J. C. CAMERON, M.D., 1ST VICE-PRESIDENT, IN THE CHAIR.

Dr. A. L. SMITH, for the author, read a paper, entitled,

Notes on Phthiriasis.

By P. W. P. MATHEWS, LL.D., M.R.C.S.E., etc.,
Dominion Coroner for the North-West Territories and Medical Officer of the Hudson Bay Company, etc.,

as follows:

A case of somewhat unusual occurrence came under my notice here some short while since—one of phthiriasis. It is the second only that I have personally known, and I trust that it will be of sufficient interest to justify me in offering you a few notes, both in connection with the case itself and the disease.

George "Beardy," an Indian, aged 30, was admitted to the York Hospital suffering from capillary bronchitis. In ordinary cases, and in cases other than the one I am about to describe, it would be, or ought to be, unnecessary to touch upon cleanliness, both as regards the patient and his surroundings, even in an Indian cottage hospital; but the nature of the case requires my emphasizing the fact that every rational and judicious precaution was taken to ensure cleanliness, both in the washing of the patient and in the changing of the body and bed clothes. The condition of the patient varied for several days, and on the evening of the tenth, symptoms of pulmonary congestion set in. I was in attendance for the greater part of the night, and on again visiting him at about 10 o'clock in the morning, found him in a comatose condition. Giving a few directions, and re-covering his chest, which he kept constantly exposed, I left and in two hours' time was hastily called by the nurse, who stated that "he was being eaten up." Upon arriving, to my astonishment, and, I must say, to my interest, I found the man one literal mass of lice, creeping over the bed-clothes, crawling on the body—one slow-moving, disgusting mass, but a living, suggestive "precursor of the grave." He was as carefully cleansed as he could be under the circumstances, and shifted to another bedstead, with clean bedding, etc., but all to no purpose, for within two hours the body was again simply infested by vermin, and so it was to the end, some six hours afterwards. Upon examination of the skin, I found a multitude of irritable-looking spots on many parts of the body, from which the nits could be detached by lateral pressure. The louse itself was the common body or clothes louse (*pediculi vestimenti*). In this connection I must note a few cases which I have collected from various works.

Dr. Whitehead relates a case which I shall here abbreviate; R. S., aged 43, a farmer, strong, of sanguine complexion, contracted a virulent form of syphilis in April, 1840, for which he was chiefly treated with induretted sarsaparilla. Seven months afterwards he suffered severely from secondary symptoms, when he was placed on a course of mercurial medicine, and became salivated, with great relief to the disease. At the end of 1841 he again sought advice, stating that for several weeks past he had been annoyed by the presence of lice about his person, chiefly on the trunk. He was scrupulously clean in his habits, and had never before been troubled in a similar way. No lice were found about the head. What little hair he had was clean, fine, and silky. The vermin so increased in number, and produced such mental distress, that fears began to be entertained for the integrity of his intellect. Upon an examination of the skin, the nits were there found to be imbedded, and at this period the generation of the insects got so considerable that the flannel vest put on clean in the morning was crowded with them by the end of twenty-four hours. For some time remedies were unavailing: sulphur, oxymuriate of mercury, white precipitate, and hellebore were freely tried, with little or only temporary benefit. At length, by mere chance, a mixture of iodide of potassium and prussic acid in full doses was given; and in a few days, after taking sixteen or eighteen draughts, the cure was permanently completed.

There is another case in which the quick generation of the body louse was remarkable. The patient was a young lady, a member of a most respectable family, in whose skin, mostly below the margin of the mammæ, the nit was found in a small pimple which gave exit to its contents like a pustule in acne. She had been troubled with these lice for several years. Mr. Bryant, of London, England, has reported a somewhat similar case: A patient who had been a governess, and who was 30 years

of age, was admitted into Guy's Hospital. The whole of her body was literally covered with lice; the irritation and scratching having given rise to excoriations and scabs. She was put into a warm bath, and all her clothes were taken away. Every precaution was adopted to remove all the insects, but two hours afterwards her body was again covered with them, although she lay in a clean bed. She was again thoroughly washed, but the vermin reappeared immediately. All the remedies employed proved useless. Bernard Valentin has also related the history of a man who suffered from intolerable itching on all parts of his body, while his skin was covered with tubercles. On incising these, each was found filled with lice. Bremser once met with a mass of lice in a tumor on the head. And Jules Choquet observed some thousands of these insects in a subcutaneous cavity. According to Erasmus Wilson, the explanation of these cases is simple; for he says that the pediculi creep from the outside of the skin into follicular tumors, when they feed on the contents, and are afterwards found as the sole occupants of these sacs.

As is well known, lice, under certain circumstances, become developed on the surface of the body, a fitting soil being supplied by filth and by the morbid secretions in skin affections, as well as by constitutional disease. But I wish the more particularly to refer to what appears to be an idiosyncrasy, or rather a condition of constitution, that in some cases appears to favor the development of pediculi, as is evidenced by the case under my own care, and those I have advanced as further illustrations, so that the statements of some old authors that divers persons "have come to their ends, being devoured by lice," are not so very improbable after all. But what appears so remarkable in this case of the Indian Beardy is what I may with some reason term the apparently spontaneous generation of the pediculi, their existence not having been noticed at an earlier stage. The man was carefully and watchfully tended from first to last, and, further, he insisted upon his chest being constantly exposed. At ten o'clock in the morning it was perfectly free from "bite" or "hæmorrhagic speck"; at twelve it was one mass of eruption. Difficulties only become intensified upon a further examination of the case, for, in the first place, their period of incubation is six days, and, secondly, judging by their organization, it is perfectly clear that these pediculi are air-breathing animals: and that, consequently, they cannot exist as adult insects under the skin, where respiration would seem to be impossible.

Among the poorer classes in England (I do not know if the same holds good in Canada), any unwonted appearance of lice in connection with a sick person is invariably regarded as a precursor of death. Is it possible that the approaching dissolution is indicated or appreciable to the insect, by the lowering of the surface-temperature, etc., and its quittance of the body to the bed-clothes attributable to this instinct?

Remarks by DR. SMITH.—Such cases as this are rare in this part of the country, because it is difficult to find any one so dirty as to give the body-lice a chance to breed in such quantities. Cases of pediculus capitis and pediculus pubis are quite frequent at the dispensary, but he has seen only a few cases of pediculus corporis, principally in neglected old men. Among the Indians of Lake Huron and Georgian Bay, and also among the shanty-men in the Upper Ottawa, the pediculi corporis were frequent guests, and by the way they were tolerated one might think that they were not altogether unwelcome; and as these persons often wear the same flannel shirt for six months or a year without washing it, it was easy to see that they would multiply continuously, as the eggs hatch in six to eight days, and one female may see the birth of five thousand descendants. The disease is easily cured by means of an ointment containing one part of the oil of delphinum staphisagria and seven parts of lard. I have also found the Ung. Hydrarg. Ammon. very effective.

Dr. J. C. CAMERON said that coal oil was a good application for body lice, and if Balsam Peru be added to it, the odor was hardly objectionable. Chloroform he has found useful for crab lice.

General Tuberculosis following a Nephritis.—Dr. WYATT JOHNSTON exhibited the kidney, bladder and other organs, and Dr. J. C. CAMERON related the case:

Patient, aged 26, had remote history of phthisis in one of his cousins. He had knocked around the world a good deal, exposing himself at times to great hardships, and drinking pretty freely. He always enjoyed good health till November, 1884, when he had an attack of scarlet fever, followed by sharp nephritis. He came under Dr. Cameron's observation in Feb., 1885. Ten per cent. of albumen was then found in his

urine, also some red blood-corpuscles and casts, chiefly hyaline. Under treatment his symptoms improved; the casts disappeared in about two months, but more or less blood and albumen remained all summer and autumn. The presence of urethral trouble was suspected, as an old gonorrhœa and gleet had persisted for a long time. No examination was made till Jan., 1886, when Dr. Roddick passed a No. 3 steel sound with some difficulty through a long, deep-seated stricture; a sharp attack of cystitis followed, which did not yield to internal treatment. When the acute symptoms had somewhat subsided, he was etherized, and an attempt made to pass a catheter and wash out the bladder, but nothing could be got past the stricture. His condition was becoming so serious that perineal section was decided on. A careful examination of the lungs revealed nothing abnormal. The operation was performed on 17th February., and his immediate sufferings thereby relieved, but his symptoms did not markedly improve. High, irregular temperature, rapid pulse profuse perspirations and gradual emaciation were the chief symptoms. About March 1st he spat up blood, and, on examination, dullness was discovered at both apices; softening soon began, and went on rapidly, till, in six weeks, his lungs were completely riddled. His wound never healed. He died 23rd April. The diagnosis lay between a general tubercular condition underlying the renal and vesical catarrh, probably fanned into flame by scarlatina, and pyæmia, due to retention of putrid matters in the bladder by a tight stricture. The rapidity of the lung break-up was particularly noticeable, repeated examinations failing to detect anything abnormal in lungs till about six weeks before death. The right kidney was made up of sacs of pus, the walls being infiltrated with tubercles. The ureter was dilated, and its walls thickened. The bladder showed evidences of the cystitis and its walls near the exit of the ureter were also thickened with tubercular infiltration. The other abdominal organs were full of tubercles, with the exception of the left kidney, which was normal. Dr. Johnson found bacilli in the lungs, kidney, ureter and bladder.

Dr. CAMPBELL said that though tubercular disease usually begins in the lungs, still it frequently attacks other organs first. In this case, most likely, it commenced in the bladder or kidney. Although it is said that no nurse ever contracted disease in the Brompton Consumption Hospital yet he had several times seen the disease attack a husband who had a consumptive wife, and *vice versâ*. He advised separation, where one had the disease. He believed strongly in the heredity of consumption.

Death following abortion.—Dr. ROWELL exhabited the uterus and Dr. ARMSTRONG related the case. He said the cause of the abortion was uncertain; the patient, aged 23, had had several before. On his arrival he found the fœtus, aged about six months, had come away, and he had no difficulty in getting away the placenta. Two days after, the woman became delirious, and had a very rapid pulse and fever. She continued suffering from apparent septicæmic poisoning till May 13th, when she died, having aborted April 5th. He was at a loss to account for the cause. The discharges were at no time offensive; she never had a chill, and never complained of abdominal pain. He washed the uterus out, using a return tube. Toward the end, vomiting set in. Dr. Rowell said that on opening the abdominal cavity he found the intestines matted together and covered with lymph and pus; the pelvis was filled with offensive purulent matter, and in the left iliac fossa was a collection of similar-looking pus, enclosed in inflammatory adhesions. The mucous membrane of the uterus was thickened and covered with a thickish bloody discharge. On the right side of the body of the uterus was a small fibroid.

Dr. TRENHOLME said that most likely she had had old pelvic adhesions, with pent-up inflammatory matters, and that the fresh trouble (abortion) again lighted up the mischief. It being painless may have been due to tolerance from repeated abdominal trouble.

Dr. KENNEDY thought this case in many respects similar to one he attended some years ago. The woman had had five attacks of peritonitis. Deep pressure over the abdomen gave little or no distress. He diagnosed the case to be tubercular peritonitis. She died suddenly, and a post-mortem examination revealed a large pelvic abscess which had burst, the attacks previous no doubt being due to slight ruptures of the abscess. Ovariotomists found they had better results follow operation where peritoneal adhesions existed, producing a tolerance to interference.

Dr. SHEPHERD thought if the case could have been diagnosed, the proper thing would have been to open the abdomen and wash out the peritoneal cavity. Recovery had followed operations for

inflammation produced by perforation of the appendix vermiformis.

Dr. WILKINS said he had seen an absence of evidence of pain in some typhoid fever cases produced by the dulling effect of the typhoid poison. In one fatal case of perforation there was no evidence of pain shown.

Stated Meeting, May 28, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Case of Hysterical Paralysis in a Boy.—Dr. LAPTHORN SMITH exhibited this case, and gave the following history :—

Joseph L., aged 11 years, was always a delicate child; never had scarlet fever nor measles. He has often had running at ears (otorrhœa), but never had any disease of his eyes until this year. Family history good; father and mother very healthy, as also his grandparents. Has six brothers and sisters living, and none dead. There is no evidence of syphilis or tubercle in any of the family. Last June his mother first noticed that he dragged his left leg in walking, and, though he was able to go about the house, he could not go out. He had no photophobia at this time. He dragged his leg for about a week, and then recovered without any treatment, returning to school, where he continued to attend until the vacation on the 1st August. From June to August, however, he complained of pain in the left knee, sometimes during the day and sometimes at night; but he did not drag his leg again until January of this year, when one day he became slightly deaf, and both external ears became exceedingly painful to the touch. Next day his eyes were red and swollen, especially the lids, and about two weeks later his legs became so weak that he was unable to stand. He could bend them easily, but could not keep them straight. One evening in March his left eye suddenly closed, and neither he nor any one else was able to open it again until a few days ago. Almost from the beginning of this attack, his legs, from the middle of the thighs to the toes, have been exquisitely painful to the touch, as also have been his external ears. This hyperæsthesia was real, for his mother several times, while he was asleep, touched him lightly on these over-sensitive parts, with the result that he suddenly awakened with a frightened scream. His father also tested his paralysis by setting fire to his clothes, but he was unable to get up. I tried several times to touch him gently on the affected parts, with his eyes blindfolded, but always with the effect of making him cry, although he would allow me to pinch him moderately in any other part of the body, even within half an inch of the sensitive parts. Neither was I able to expose his pupil. He had such a dread of the light reaching the retina of his left eye, that even when I forced the lids apart he rolled the cornea up out of sight. I examined his spine carefully, and there is no tender spot, and the patellar reflex is quite normal. I thought his case one of functional nervous disorder, and as he was pale and weakly, I placed him on a ferruginous treatment with syrup of iodide of iron. He had only taken this remedy for less than a week when his father returned from the country with some ferns and Dr. John's herb, which a friend recommended him to use on the boy's legs. He boiled them together, and rubbed the boy's legs with the decoction during ten minutes, in spite of his cries, and afterwards made poultices of the leaves and bandaged them on to his legs. The next morning the boy walked with a little difficulty, but without assistance, into the kitchen. That morning the pain left his legs, but instead he complained of a feeling of pins and needles in his feet, and also in his left eye, which he was able to open three days later. He is now quite well.

Dr. Smith had met with somewhat similar cases in young females, but this was the first he had seen in a boy, and he thought it of sufficient interest to bring before the Society.

Dr. HENRY HOWARD said the temporary paralysis, whether it occurred in males or females, was always hysterical, and recovered without treatment, and that, unfortunately, the recovery was generally attributed to supernatural miracles.

Gunshot Wounds of the Chest.—Dr. JAS. BELL then read a paper on this subject.

CASE I.—*Penetrating Wound of Lung; Gangrene; Recovery.*

Corporal J. E. L., 90th Battalion, aged 24, was wounded at the Fish Creek fight on the 24th of April, 1885. He was shot in the chest while lying facing the ravine in which the enemy were concealed, at a distance of about one hundred yards from him. The bullet passed through the second left costal cartilage, beneath the sternum, downwards and outwards towards the right side, making its exit through the 7th rib in the mid-axillary line. Before being removed from the field he also re-

ceived a flesh wound over the right trochanter major, which, although not in itself serious, added greatly to his sufferings on the journey to Saskatoon and subsequently. He, with the other wounded from Fish Creek, arrived in Saskatoon on the 2nd of May, having been driven forty-five miles in a lumber waggon over the "trail." The period of seven or eight days intervening between the time of his injury and his arrival at Saskatoon was one of very great hardship to a man in his condition. The weather was cold, especially at night, and windy, and a considerable part of the time wet; their only shelter was the ordinary "bell" tent, and there were neither the materials nor the facilities for making warm and soothing applications to the chest nor was there any suitable invalid diet. On arrival at Saskatoon his condition was very bad indeed. The greater part of the right lung was consolidated, and his breathing painful and rapid. There was also high fever and troublesome diarrhœa. Empyema followed, and on the 8th of May Deputy-Surgeon-General Roddick enlarged the wound in the right axillary region evacuating a quantity of pus which was very fœtid. The pleural cavity was then washed out daily with antiseptic solutions (carbolic, alcoholic and boracic at different periods); and from time to time portions of gangrenous lung tissue presented at the wound and were removed. In spite of these precautions, however, he continued to suffer from high fever, perspirations, fœtid discharge, and great weakness. On the 23rd of May, with the advice and assistance of Dr. Roddick, I attempted to make a dependent opening. The patient was etherized and an incision made in the eighth intercostal space, posteriorly. On reaching the pleura, however, the lung was found to be firmly adherent to the chest wall at this point. The wound was therefore closed, and the original axillary wound enlarged, and the cavity explored with the finger and long probes. A considerable amount of sloughy tissue was found lying unattached in the cavity, and was removed. The cavity was then emptied as well as possible, and washed out with weak carbolic lotion. On introducing the finger into the cavity it was found to be as large as a large-sized orange, and surrounded on all sides by pulmonary tissue. It was an intra-pulmonary cavity, and not, as we had supposed, a localized pleural sac. As he recovered from the ether he was seized with a severe and prolonged fit of coughing, in which he expectorated pus and fluid from the pleural cavity which had a distinct carbolic odor, and caused unmistakeable tingling in his mouth. From this time forward the pus was expectorated constantly and freely, and in a day or two was free rom smell. The wounds healed up rapidly. All his symptoms subsided, and from this time his recovery was uninterrupted. In a few days he was able to be taken out into the air and sunlight, and in a couple of weeks was convalescent. He was one of the last remaining patients at Saskatoon, and embarked on the hospital barge on the 4th of July, and was discharged when he reached Winnipeg on the 15th of the same month. He has since enjoyed the best of health, and at the present time writes that he is quite well and strong. I have no doubt but that the thorough exploration of the cavity and the removal of sloughy tissue on the 23rd of May opened communication with a bronchial tube of considerable size, and that henceforth the cavity was kept freely evacuated by expectoration. This, I think, was the starting-point on the road to his recovery, which progressed with marvelous rapidity from that time.

Case II. *Penetrating Wound of Chest.*

Private H. H. M., 10th R. G., aged 19, was wounded at Batoche on the 12th of May, 1885. When brought into the zareba he was suffering from dyspnœa and painful inspiration. He had also coughed up a little blood soon after receiving the wound. On examination, a bullet wound was found about an inch to the right of the vertebral column, opposite the fifth dorsal vertebra. The track of the bullet could be traced as far as the vertebral column, passing deeply through the muscles of the back, and the bullet itself (a round one) was felt beneath the skin at the angle of the left scapula. It was immediately removed, and the wounds cleansed and dressed, with iodoform. There were no marked chest symptoms until after his removal to Saskatoon, where he arrived on the 15th. The wound was then suppurating freely, and he suffered from considerable pain and uneasiness in the side and high fever. A few days later the left chest was found to be gradually filling with fluid; a hypodermic needle was introduced, and half a drachm of odorless sero-pus withdrawn. The chest filled rapidly, and the patient suffered from chills and fever. The pleural cavity soon became filled to the apex, and displaced the heart slightly. The flow of the pus from the wounds now became greatly increased, and pus was forced out from both

wounds, but especially from the posterior one (the wound of entrance of the bullet), on coughing. I then administered ether, and made a free opening through the 7th intercostal space and in the existing wound, and evacuated a large quantity of pus having a slightly fœtid odor. Through this opening also came, at this time, pieces of red cloth rom his tunic and pieces of his shirt and undershirt. On examination, while the patient was under ether, a long probe passed directly into the pleural cavity from the original wound. The bullet was found to have passed between the spines of the 5th and 6th dorsal vertebræ, close to the bodies of the bones, and to have roughened the edges of both spines. The opening of the cavity and the insertion of a large drainage-tube gave great relief, and all the active symptoms subsided promptly, although the discharge continued for a long time. His recovery was slow. The pleural cavity was washed out with antiseptic solutions from time to time, and nourishing food and stimulants were administered, and the patient was soon able to leave his bed and go out into the fresh air and sunlight in daytime. He was brought down to Winnipeg on the hospital barge, still very weak, and placed in the General Hospital there on the 15th of July under care of Dr. Kerr. He remained there for some time, and reached his home in Toronto, I believe, about the end of September. He is now perfectly well. There was great retraction of the chest-wall during convalescence.

In this connection I wish to mention briefly two other cases which did not come under my observation at the time their injuries were received, but which I saw later on.

Pvte. L., 65th Batt., was wounded on the 28th of May at Frenchman's Butte. He was struck on the posterior wall of the right chest, the bullet making its exit in front at a point nearly opposite. He suffered from severe respiratory symptoms and spat up some blood, and a penetrating wound of the chest was diagnosed. He recovered rapidly, however, and when I saw him, on the 12th of July, his wounds being then perfectly healed, there were no chest symptoms, no alteration in the conformation of the chest, and no physical signs to indicate that the pleural cavity or its contents had even been disturbed in any way.

A similar case was that of Sergt. F., N.W.M.P., who was wounded about a week later in Steele's engagement at Loon Lake. He also had very severe symptoms of pulmonary injury, dyspnœa, bloody expectoration, hurried breathing, etc., but recovered rapidly and perfectly without any serious pleural or pulmonary inflammation. I saw him on the 18th of July, on his return to Calgary to report for duty. He was then apparently in perfect health.

In gunshot wounds of the chest, the important point in prognosis is, of course, whether the bullet has penetrated the chest walls or not. In the surgical history of the American Rebellion the mortality in a group of over 8000 cases of penetrating wounds is given at 62.5 per cent., while in a similar group of non-penetrating wounds the mortality is 2 per cent. The four cases which I have reported show the difficulty of making an exact diagnosis, unless the patient can be kept under the observation of the same surgeon throughout his illness; and as our knowledge of such wounds must be mainly derived from military surgery, this is, of course, nearly always impossible.

Case II of this series was not thought to be a penetrating wound when treated on the field. Cases III and IV were so diagnosed, and yet, I think, the subsequent histories show that case II was undoubtedly a penetrating wound, and that the others were not. One could hardly help making such a diagnosis, however, with the symptoms shown by these men at the time of receiving the wound—cough, distressed and hurried breathing, and bloody expectoration. The fact that the symptoms did not persist beyond a few days, and that there was no evidence of pleural or pulmonary inflammation, or of the results of such inflammation, makes it quite clear. I think that these were only wounds of the soft parts of the chest wall, external to the pleura, and the blood expectorated at the time of the wound may be explained by the contusion produced by the bullet. I consider Case I an extraordinary recovery, under all the circumstances, and considering the nature of the injury and its termination in gangrene, which destroyed a large portion of the lung. Empyema followed, as a matter of course, but, fortunately, the axillary wound was favorably situated for the evacuation of the pus and the removal of the necrosed pulmonary tissue.

Dr. SHEPHERD congratulated Dr. Bell on the success of his cases—a success which would, before the days of antiseptic surgery, have been almost impossible. He thought that when empyema followed gunshot wounds that it should be treated as other empyemas—by free and dependent

drainage. He deprecated the probing of gunshot wounds, and related a case of pistol wound of the lung which was in his wards at the General Hospital last summer, where the wound healed by first intention, and, with the exception of spitting a little blood, and having a local area of dullness for a few days, no other symptoms were present, the patient recovering completely without the slightest fever. The treatment was altogether expectant, and no search for the bullet was made.

Dr. HENRY HOWARD said that fifty years ago he took lectures on surgery, delivered in Dublin by Sir Philip Crampton, Surgeon-General, who said, speaking of wounds received in the battle of Waterloo, that recovery generally took place if the ball passed through the chest and came out, but death generally followed if the bullet remained in the chest cavity. Much of the success now seen in these cases was due to drainage.

Dr. FENWICK said he regretted not being present when Dr. Bell read his paper. He spoke against being too anxious to remove bullets lodged anywhere. Too much probing often did great harm. If the bullet could not easily be reached, drain, and leave it. Nature generally encysts it, and so prevents its doing mischief.

CANADIAN MEDICAL ASSOCIATION.

Nineteenth Annual Meeting, held at Quebec, August 18th and 19th, 1886.

The nineteenth annual meeting of this Association was held in Laval University, Quebec, on the 18th and 19th of August. The meeting was opened by the Hon. Dr. Sullivan of Kingston.

After routine business and the presentation of the report from the Committee on obstetrics (the only Committee which made report), the PRESIDENT-ELECT, DR. T. K. HOLMES, of Chatham, Ont., was introduced, and delivered an address, which will be found elsewhere.

SURGICAL SECTION.

WEDNESDAY, AUGUST 18TH.

DR. GEORGE E. FENWICK, OF MONTREAL,

IN THE CHAIR.

DR. DESJARDINS, of Montreal, read a paper on

KERATOSCOPY AS A MEANS OF DIAGNOSIS IN ASTIGMATISM.

After defining the term astigmatism, he said that errors of refraction affect the vision injuriously, although the optic nerve be healthy. It was formerly supposed that the fault was in the lens, but it is now known to be due (as was first pointed out by Donders) to the curves of the cornea. The lens, according to later investigators, partakes of the same deformities as the cornea. Accommodation is not without influence on refraction. After mentioning that corneal anomalies are detected by the keratoscope, Dr. Desjardins exhibited and described an instrument of simple construction made by de Wecker and Masillon, by which the meridians and amount of astigmatism can easily be determined. Many cases of slight astigmatism can be rapidly detected and suitable glasses prescribed. By the aid of this instrument, one scarcely needs to submit the patient to a subjective examination, and for this reason the author finds it especially useful in children.

DR. JAMES BELL, of Montreal, read a paper on

TRACHEOTOMY IN MEMBRANOUS LARYNGITIS,

in which he advocated dispensing with the tube in the after-treatment of tracheotomy. He said that the method of stitching the cut edge of the tracheal to the edge of the neck wound and the nose of the canula had proved of but little benefit in actual practice.

He preferred late to early operations in membranous laryngitis for the following reasons, viz.: (1) If patient were operated on early many would be operated on unnecessarily; (2) Extension of membrane takes place more rapid after tracheotomy; (3) If the obstruction is not rapidly produced, membrane is separated and expelled. The recoveries after early operations were 25-33 per cent.; after late operations, 5–10 per cent. A greater percentage recovery without operation. He next entered on the question as to whether the extension of the membrane is due to general or local causes, and thought that the weight of opinion is that extension is due to general or local causes, and gave a number of cases illustrating this point. After discussing the subject as to whether diphtheria is or is not primarily a local disease, he gave his reasons for not liking the tube in tracheotomy: (1) The tube never accurately fits; (2) When the tube is in place, the incisions into the trachea cannot be kept under observation; (3) Occasionally the tube, from not being in the middle line, and being left too long in the trachea, ulcerates through, and an artery may be opened; (4) When the tube is in the trachea, there is difficulty in expelling through it pieces of membrane; (5) The tube causes sometimes exuberant granulations and warty

growths. In place of the tube, Dr. Bell has devised an instrument which he thinks does away with the objections to the tube. It consists of a pair of "clips," which catch the edge of the trachea and hold it apart. They are held in position by a tape which goes round the neck. He had experimented with the clips in a number of dogs, and found that they held well, and that no ill results followed.

In speaking of the place of operation, Dr. Bell stated that he preferred the low operation, because there was more room, and also because, by it, we get further away from the disease. In the after-treatment of cases in which the "clips" are used, he withdraws the mucus, etc., from the trachea by means of a glass pipette. He said he did not believe in the close camp-bed which is now so often used, but preferred a free current of air. After operation he plugs the trachea or larynx above the wound with antiseptic sponge; this abords the discharges and helps to localize the membrane. Over the wound he keeps a piece of gauze, and he occasionally introduced vaseline into the trachea. When the tube is used, after two or three days, the breathing becomes dry, and the end of the tube becomes coated with inspissated mucus; below this, in the trachea, is a cone of dried exudation which helps to block up the passage.

Dr. Bell gave the histories of two cases of diphtheria in which he had operated and used his "clips." One case died, and the other—aged twenty-five months—recovered. In nine cases of tracheotomy, in which he has used the tube, all, with one exception, died.

He summed up by saying that the excessive mortality after diphtheria was due to defects in the after-treatment. The presence of a tube is a source of irritation and prevents the application of remedies.

Dr. A. L. SMITH, in the discussion which followed, said that when house surgeon to a children's hospital in London, he had a large experience with cases of tracheotomy. He believes that the "clip," introduced by Dr. Bell, will prove of the greatest possible benefit and will, in all probability, reduce the mortality after the operation. He had seen one death from ulceration of the tube into a large vein.

Dr. KERR, of Winnipeg, said that he had considerable experience in tracheotomy whilst in Nova Scotia. He had performed it twelve times, and never had a good result. He did not think tracheotomy is a good operation, and had seen most desperate cases recover without it. If Dr. Bell's treatment without a tube reduced the mortality, it would be a great gain. Dr. Kerr went on to say that the after-treatment of tracheotomy is always a source of anxiety; the tube is apt to get displaced during fits of coughing. In his last case he dispensed with a tube and stitched the edge of the cut trachea to the edge of the wound, as recommended by Post. He did not like this method, for when the patient's chin was depressed, the opening closed. He thought that with Dr. Bell's instrument he could do better. As to the question of the general or local origin of diphtheria, it was too large a subject to discuss at the present time. His last tracheotomy case lived three weeks and died of paralysis, so that it is not always the extention of the membrane that kills after tracheotomy, and the best after-treatment will fail to produce a good result. He was very doubtful about the good that would result from plugging the trachea above the wound.

Dr. F. J. SHEPHERD said that he had performed tracheotomy a number of times both in hospital and private practice. His first ten or a dozen cases were all fatal, but during the last two and a half years he had performed tracheotomy in private practice his results were not so good. He thought that the kind of instrument used did not matter much; it was important that the wound should be kept aseptic. He removed the tube as early as possible, never later than the fifth day; in one successful case he removed the tube on the third day; they were all cases of diphtheria. He preferred the low operation because the trachea is opened at a greater distance from the disease, there is more room, and it is not necessary to cut the cricoid cartilage. In the high operation division of the cricoid had to be frequently undertaken and often resulted in necrosis. Again, stenosis more frequently occurred after the high operation. Dr. Shepherd believed that after operation it was useful to have a warm room (75°–80° F.), and that the atmosphere should be saturated with moisture. He always used a croup or closed bed, and the steam of the kettle was conveyed into it by a huge spout. The inner tube was removed every hour, and the outer one on the second day, lime-water was occasionally dropped into the tube. He thought that the tube favored expulsion of membrane. With regard to the antiseptic plugging of the trachea, he did not think it of much benefit.

Very often the membrane extended, at time of the operation, below the wound, and if it did not, the continuity of the mucous membrane could not be interfered with. He had never seen the conical plug in the trachea described by Dr. Bell. All the cases of death after tracheotomy he had seen had been due to extension of the membrane. Theoretically Dr. Bell's instrument was perfect, but it remained to be seen what it would do in practice.

Dr. RUSSELL, of Quebec, had not seen half a dozen cases of diphtheria in twelve years, but during the last year he had seen a great many cases of membranous croup. He thought this disease was more fatal than diphtheria. He was formerly opposed on tracheotomy, but now thought early operation advisable: if the operation did not cure, it always relieved. He had performed tracheotomy six times with two recoveries. He thought Dr. Bell's instrument was a most ingenious one, and likely to prove very useful. In the after-treatment he was strongly in favor of using lime water spray.

Dr. FENWICK, of Montreal, said that he preferred the high to the low operation. Dr. Bell's instrument appeared to answer very well. Dr. Marshall Hall, many years ago, devised a somewhat similar instrument made of wire. He had seen one of Dr. Bell's cases treated with the "clips," and formed a most favorable opinion of the instrument.

Dr. FENWICK, of Montreal, read a paper on

TREATMENT OF TUBERCULOUS GLANDS OF THE NECK.

He believed that scrofulous glands are intimately connected with tubercle. After giving a sketch of the history of tubercle and Koch's discovery of the tubercle bacillus, he said that there must be some predisposing condition in the individual so that he can contract tubercle—the proper soil must be present. The glands of the neck are specially liable to infection, especially the submaxillary and those over the large vessels. Enlargement is rarely single, and occurs generally at first one side of the neck only. Often there are no external signs of softening of the gland, but when the glands break down and open externally and indolent ulcers and sinuses are left. The disease generally first shows itself in a single gland and then spreads to other parts; very little is known of the mode of entrance of the tubercle bacillus. In scrofulous enlargement of the glands of the neck the author strongly advised early removal of enlarged glands. After removal the general health of the individual improves; if they are left, the patient runs the risk of general tuberculosis, and if he recovers it is with impaired health and a number of disfiguring scars on the neck. The author preferred removal to laying open and scraping out the gland or the cautery puncture of Mr. Treves. He related a number of cases in which he had removed large numbers of glands from the neck. In his first case, which was operated on in 1873, he removed some half dozen glands from the neck beneath the sterno-mastoid; the scar was now hardly to be seen. Dr. Fenwick shewed a number of photographs of cases, before and after operation, where the results were most admirable, the cicatrices being hardly perceptible.

Dr. KERR, of Winnipeg, said that if we accepted the principle of the identity of scrofula and turbucle much confusion would be removed. He was not satisfied with the results of operation and did not now operate so often as formerly; he found the operation not only very tedious but difficult and dangerous, and the results were not always so good as represented. Dr. Alexander, of Liverpool, who formerly operated some twelve years ago very frequently in these cases, has now given up the operation.

Dr. SHEPHERD, of Montreal, confessed that the results of operation were not always so perfect as were described by the enthusiastic advocates of the operation, but in many cases the results are entirely satisfactory. Occasionally there are high temperatures after operation; sometimes attacks of cellulitis. He had operated in a good many cases, and had removed as many as twenty to thirty glands at a time. Apparently solid glands not infrequently come to pieces during removal, and are found to be quite soft in the centre. These conditions always complicate the operation. After incising the deep fascia, he prefers removing the gland with the fingers, and an occasional cut with a knife.

He has never had any accident attending the operation. Although he has had no experience with Treves's cautery puncture, he does not think it suitable for glands deeply placed. In sinuses and scrofulous ulcers, he has had most excellent results from scraping out the parts with Volkmann's spoon.

DR. TRENHOLME, of Montreal, read a paper on

SOME DETAILS OF UTERINE AND OVARIAN OPERATIONS.

He said the instruments used in these operations need not be numerous or complicated. After describing the usual precautions that should be taken regarding the cleanliness of hands, sponges, and instruments, he said that he prefers No. 1–20 shoemakers' thread to any other form of ligature. Before used the thread should be immersed for twenty-four hours in pure carbolic acid, and not put into water at all. In closing the abdominal wound, he uses silver wire for the deep sutures and horsehair for the superficial. He laid great stress on the importance of not enclosing any muscular tissue in the suture. The incision should be midway between the umbilicus and pubis, and should not extend to within one and a half inches of the pubis. He advised short incisions of one to two and a half inches. Muscle should never be cut in the incision, as it gave great trouble afterward

The pedicle of the tumor should be ligated in small segments, and the large vessels should be ligatured separately and the ligature cut short. The cavity of the abdomen should be thoroughly cleansed with sponges, and drained when necessary. He objects to abdominal bandages, and has only used them after the removal of the largest tumors. He allows his patient after the operation to move freely in bed; this favors the reposition of the bowels. In uterine fibroids, when large, he always divides the mass in the median line, then each half is enucleated. The stump should be cut in the shape of a V, and the edges brought together with a running suture and quilted with the shoemaker's stitch. He has found linseed-tea enemata of great service after operation; fomentations to the abdomen were also very beneficial. No after medicinal treatment is needed, except when there is vomiting; in this he has found sipping hot water useful, and also ipecacuanha in homœopathic doses. He uses the third dilution.

Dr. MACFARLANE, of Toronto, would have liked to hear Dr. Trenholme say more about dietetics. In his operation he had found vomiting to be a very troublesome complication; warm water with a flavoring of brandy he had found of great service in these cases, also frequent small doses of epsom salts as recommended by Lawson Tait. He never gave any medicine at all when there was any threatening of peritoneal trouble. He never used drainage unless the adhesions were extensive.

Dr. SHERMAN, of Ogdensburg, would like to have heard more details regarding the preparation of the patient, also as to whether he referred, when speaking of fibroids, to extra or intra-mural growths.

Dr. MACDONALD, of Wingham, Ontario, would like to have heard more details as to the closure of the wound, and also as to the value of the clamp in securing the pedicle, and whether operation for ovarian tumors should be performed early.

Dr. KERR, of Winnipeg, had seen hernia follow the operation, due to failure of union in central portions of wound. He would like to know why Dr. Trenholme objected to including muscle in his sutures.

Dr. SHEPHERD, of Montreal, thought that wounds of the abdomen are much the same as wounds of other parts, and that abdominal surgeons make a great ado about their special methods of healing this abdominal incision. General surgeons, who are operating every day in every part of the body, have no fear of including muscle in their sutures. He did not understand why an abdominal wound should heal so differently from wounds in other parts. So far as he himself was concerned, in performing abdominal section, he treated his incision as an ordinary wound. He used silk or catgut sutures and passed them through the whole thickness of the wall of the abdomen; union invariably took place by first intention. Every gynæcologist thinks it incumbent upon him to have some special mode of treatment of the abdominal incision, and seems to think that general surgical principles are not applicable to it. Dr. Shepherd had not much faith in ipecac used in the third dilution.

Dr. FENWICK said that he had operated a number of times for ovarian tumors with fair success. He agreed with the remarks of the last speaker. He always used silk sutures and objected to horsehair because knots made in it did not hold well. In treating the pedicle he first clamped it and then tied all the large vessels; afterwards, he tied the pedicle with the Staffordshire knot and removed the clamp. He had used hot water occasionally to cleanse the abdomen.

Dr. TRENHOLME, in reply, said he spoke of interstitial fibroids. He formed the pedicle out of the labial borders of the uterus in such a way that he left the broad ligaments to sustain the pelvic viscera. He used the shoemaker's stitch to secure primary union. With regard to the external wound he thought that the conditions found in the abdominal cavity existed nowhere else. It is of the greatest importance to secure primary union so

that there shall be no subsequent hernia. For vomiting he used hot water over the wound, and ipecac in minute doses. In preparing the patient he avoided purgatives as much as possible. In cold weather he kept the extremities of the patient wrapped up in cotton-wool.

Dr. SHEPHERD, of Montreal, next read a paper on

EXCISION OF THE TARSUS IN TUBERCULOUS DISEASE OF THE BONE.

He commenced by saying that formerly when there was carious disease of the bones of the foot the only resource was amputation, but with the advent of antiseptic surgery and the establishment of conservative principles of treatment, other methods of procedure have been adopted with success.

In cases of tuberculous and carious disease of bones the necessity for amputation is not immediate, and it is the duty of the surgeon to endeavor first to remove the local disease before sacrificing the foot. It is not necessary to perform a Hey's, Chopart's, or Syme's amputation in these cases, but merely to remove all the disease, however extensive The reader of the paper illustrated this principle by giving the histories of several cases. In one case, where there was disease of both feet, he removed on the right foot the cuneiform, scaphoid, cuboid, and bases of the metatarsal bones and on the left the lower end of the tibia, astragalus, part of the os calcis, the scaphoid, and cuboid. The result was excellent, and the patient, a girl aged seventeen, was able to walk about comfortably. In children it is often sufficient to remove the diseased portion with Volkmann's spoon, and in them amputation is hardly ever required.

Dr. MACFARLANE, of Toronto, had followed out the principle advocated by the reader of the paper for years. He believed it is the proper method of treatment, and should be extended to caries of the spine. In dressing the wound left after excising tarsal bones he never stuffed the wound with any thing, but placed the foot in a good position and left the rest to nature.

Dr. DUPUIS, of Kingston, said he recently had a case of disease of all the tarsal bones in which he performed amputation; afterward the tibia necrossed and he had to reamputate. He also reported a case of frost-bite in which he had removed the greater part of the tarsus.

Dr. HOLMES, of Chatham, remarked that Dr. Shepherd's paper was a good examplification of conservative surgery. He had several times excised the ankle-joint with the best results.

Dr. KERR, of Winnipeg, said that patients, after operation, should not be allowed to walk about too soon, as they were apt to have a splay foot. He did not believe in leaving the wound to nature altogether, but preferred keeping it in an aseptic condition.

Dr. RUSSELL, in Quebec, also insisted that the wound should be carefully protected, and that antiseptic dressings should be applied. If the wound were left to nature it would soon become putrid, and all the dangers incident to such condition would be incurred.

DR. FENWICK said he could mention a number of cases in which he had resected the tarsus with the happiest results. He related the case of a gentleman (a medical man) who had been wounded at the battle of the Alma, and had carried the bullet in his heel for nearly thirty years. The os calcis was trephined, and the bullet removed, with the result of a rapid closure of the cavity and a useful foot.

DR. KERR, of Winnipeg, read a paper on the

EVACUATION OF AN ABDOMINAL HYDATID CYST.

The patient was an Icelander, who came into the Winnipeg Hospital last winter with a large abdominal tumor. From the history, and as the result of exploratory puncture, the attending physician, Dr. Whiteford, made the diagnosis of hydatid cyst, and handed the case over to Dr. Kerr for operation. The operation was performed in two stages as recommended by Volkmann. A cut was first made down to the growth, and six days after it was incised. To open the cyst he had to cut through two inches of the liver. The cyst was then emptied and washed out with a solution of iodine. The patient did well, and went home in two months. He marked that these are rare cases. Up to 1880, only 155 cases have been reported. This is the second case that has been in the University Hospital. The other patient was operated on but died on the table.

Dr. ECCLES, of London, Ont., related the history of a case which had been treated a year ago in the London Hospital.

THURSDAY, AUGUST 19TH.

Dr. KERR reported cases of

GUNSHOT WOUND OF THE HIP-JOINT.

Both cases were caused by the incidental discharge of small shot. The soft parts were much torn, the trochanters in both cases were split, and the joints laid freely open. In the first case the patient was not seen till three weeks after the

accident, and had had no treatment, his condition was deplorable. The whole wound was in a sloughy condition and horribly fetid. The patient was in a septic condition. The wound was thoroughly cleansed, the sphacelated portions freely excised, and the wound irrigated and packed with iodoform gauze; an anterior wire splint was also applied. The improvement at first was marked, but the patient died of septicæmia and exhaustion in a short time. The second case was seen immediately after the accident; the wound was treated in the same way, and the limb fixed in an anterior Smith's splint; a posterior splint was also employed, so that immobility was secured, and recovery with a useful limb resulted. Dr. Kerr referred to other methods of the treatmeat, viz., excision and amputation. In these cases the mortality was high. He brought these cases before the Section in order to show what could be done by conservative methods in such cases.

Dr. CLARKE, of Toronto, said that a number of cases of gunshot injuries of the hip were reported in the *Surgical History of the American Rebellion*. He had seen several cases treated when with the Federal army in Virginia. They were treated under canvas, and did well.

Drs. Russell, Fenwick, and Shepherd also joined in the discussion.

Dr. BULLER, of Montreal, read a paper on

THE TREATMENT OE ACUTE PURULENT OPHTHALMIA.

He remarked that eyes are now seldom lost in these cases, some use hot applications, others cold; some use astringents, others do not; some use antiseptics, others rely on frequent and thorough washings. All are agreed on the necessity of frequently cleansing the diseased eyes. Many remedies are used, as quinine, boracic acid, corrosive sublimate, etc. The antiseptic treatment is still on trial. Solutions used as germicides must be strong, weak solutions are of little value as antiseptics. He had lately treated three cases of acute gonorrhœal ophthalmia. He first used boracic acid, and afterward a solution of corrosive sublimate, the latter in the strength of 1 : 2000 without improvement, but the application of a solution of 1 : 1000 was followed by immediate and marked improvement. The patient was discharged cured in twenty-four days. In the other case the patient was a child, aged three years, with acute vaginitis; under similar treatment patient rapidly recovered.

In the third case, also one of genorrhœal opthalmia, there was sloughing of the cornea. I treated it by hot fomentations and washes of bo acic acid and sublimate solution used warm. In provement immediately followed, the slough sepa ated and a clean ulcer was left which soon healed

Dr. Buller thinks that in general practice a rigid cleanliness is not sufficiently carried out. With re gard to cold applications, he thinks they are the best, but whilst applying them the cornea should be closely watched; if there is any cloudiness, hot applications should immediately replace the cold and the cornea will be saved.

Drs. Smith, Russell, and Fenwick took part in the discussion which followed.

Dr. SHEPHERD, of Montreal, read the notes of a case of

AINHUM

which he had treated in the Montreal General Hospital. The disease affected the little toe of the right foot of a negro, æt. forty-seven, born in North Carolina. The little toe became affected some six years before. He first noticed a small ulcer on the digito-plantar fold, then a constriction surrounded the toe at this point which gradually deepened. The toe was much larger than normal. He suffered greatly when walking. The toe was amputated and on dissection appeared to consist of much thickened skin and fibrous tissue. The bones of the toe were much atrophied and the joint had disappeared; the proximal phalanx looked somewhat like a claw. The reader of the paper then gave a short sketch of the history of the disease, saying it was first accurately described by Dr. Silva Lima, of Brazil, that it was a disease confined to the dark races, and was more common in some families and more in men than women. It sometimes affects the fingers and even limbs. The disease, if left to itself, lasts about ten years, and ends by amputating the member affected. The word "ainhum" is a negro word, and means "to saw."

Dr. FENWICK, of Montreal, reported a case of

AMPUTATION AT THE SHOULDER-JOINT FOR MYELO-SARCOMA OF THE ARM.

Patient, a woman, aged forty-seven years, seven months pregnant, came to Montreal General Hospital in the spring of the present year, with a large ulcerated tumor a little below the shoulder of the right arm, and a smaller tumor near the biceps. Two years ago she had received a blow, and within three weeks perceived a small lump at the site of injury. It grew rapidly and was removed. She was told that it was a fatty tumor. It soon return

ed, and this time plasters were applied by a "cancer doctor," which burnt the tumor, and caused the ulcerated appearance which was seen when admitted to hospital. Dr. Fenwick amputated the arm at the shoulder-joint, and patient did remarkably well, never having a temperature higher than 99° F. On examination, the tumor proved to be a myeloid sarcoma. This was the first case Dr. Fenwick had seen in which the myeloid tumor first affected the tissues external to the bone and periosteum.

Dr. A. LAPTHORN SMITH read a paper on

ALEXANDER'S OPERATION AND THE TREATMENT OF DISPLACEMENTS OF THE UTERUS.

After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments are really muscles, and are in a state of tension, except during coition. They are the homologues of the cremaster muscle in the male. Dr. Smith considered that the risks of the operation are great, and that it is not a justifiable one, except in extreme cases, and when performed did not permanently cure displacements of the uterus. He prophesied that it would soon fall into disuse. The author said that displacements of the womb could be corrected by lessening congestion, by keeping the liver clear and the lower bowel empty. The paper was illustrated by diagrams and tables.

Dr. TRENHOLME agreed with Dr. Smith that the operation was one that would soon be known only in history. He had operated once, but had failed to find the ligament. He, himself, many years ago, suggested a similar operation.

Dr. SHEPHERD had frequently dissected the round ligament, and had performed operations on the dead subject. The uterus could be easily elevated by pulling on the ligaments. He did not think the fact that a few muscular fibres had been found on the ligament proves that it is now in active use as a muscle; it is, rather, a fœtal remnant of the ligament of the Wolffian body, and the homologue of the gubernaculum testis of the male.

Dr. AHERN, of Quebec, said that the round ligament is frequently abnormal, and that at its insertion is often much atrophied. In cases where the the uterus is fixed, tightening it will not correct displacements.

The Section then adjourned.

OFFICERS ELECTED FOR NEXT YEAR:

President.—Dr. J. E. Graham, of Toronto.

Vice-Presidents.—For Quebec, Dr. Russell; *for Ontario*, Dr. Dupuis; *for Nova Scotia*, Dr. Wickwire; *for New Brunswick*, Dr. Currie; *for Manitoba*, Dr. Crowther.

Local Secretaries.—For Quebec, Dr. J. Bell; *for Ontario*, Dr. McKeough; *for Nova Scotia*, Dr. Trueman; *for New Brunswick*, Dr. Lunam; *for Manitoba*, Dr. Kerr.

Place of Next Meeting.—Hamilton; Chairman of Committee of Arrangements, Dr. Malloch.

Progress of Science.

THE TREATMENT OF OTORRHŒA.

Common as otorrhœa is very few physicians understand how to treat it intelligently and properly. The treatment is very simple and nothing is more satisfactory in its results.

Supposing that the otorrhœa is uncomplicated with fungous granulations or polypi, the ear is first cleansed with a syringe and warm water. Then it is to be dried out thoroughly by twisting a soft rag and passing it down to the bottom of the meatus so that it will absorb all moisture from the ear. Next sufficient boracic acid is put into the ear and worked down upon the drum so as to cover its surface. The powder should not be packed down upon the drum. It is allowed to remain there 24 hours, when the ear is again syringed, dried out, and the powder reapplied as before. The treatment must be repeated daily until all suppuration ceases. After that twice, or even once, a week is often enough to repeat the application. The dry powder must be applied to the ear for two or three weeks after all suppuration has ceased. This is the treatment of uncomplicated otorrhœa in a nut shell, and the result is nearly always very satisfactory. I have the common acid rubbed in a mortar till it assumes a granulated form, like granulated sugar, and use it in preference to the minuter powder of different firms, because it goes down to the bottom of the meatus easier and does not hang to the walls so persistently as the fine powder.

PRURITUS VULVA.

Martineau (*Annales Medico-Chirurgicales*) notes that this arises sometimes in the course of affections unconnected with the vulva, at others during the evolution of a disorder or lesion of this part. In the first class are intestinal worms, the oxyuris in particular; these wander at night over the neighborhood of the anus and genital organs. They should always be looked for there and then, especially in children, where there is an absence of any direct cause. Tinea tonsurans and the

pediculus pubis are other causes. Affections of the bladder, vegetations, and polypi of the urethra may lead to it. Glycosuria, also, either temporary in wet nurses, those who take much sugar, or permanent, as in diabetes. In the second category may be ranged pruritus, consecutive to various primary or secondary inflammations of the vulva, which may be simply local, or proceed from a general diathetic or constitutional cause, as tuberculosis, eczema, herpes, psoriasis, lichen, epithelioma. Vulva pruritus may be purely nervous, and then appears without any manifest lesion of the mucous membrane or skin; at times it may be associated with urticaria. The diabetic form is best treated with the effervescent citrate of lithia, with addition of a little arseniate of soda. Locally, during the acute stage, lotions of bromide of potassium or of chloral are recommended, and in the chronic phases a weak solution of corrosive sublimate and alcohol.—*Edinburgh Medical Journal.*

HYDROCHLORATE OF COCAINE IN THE VOMITING OF PREGNANCY.

Weiss, of Prague, has used this remedy successfully in case of vomiting in pregnancy which had resisted all previous attempts at relief. The patient was weak and anemic, of a certain disposition, and had suffered in three previous pregnancies from persistent vomiting: in the present pregnancy her condition was serious. Weiss described:

℞ Hydrochlorate of cocoaine.....gr. ij;
Alcohol, enough to dissolve.
Water..... ..... ℥ v.
S: One teaspoonful every half hour.

After the sixth dose three tablespoonfuls of milk were well borne; after the eighth, a cup of broth with egg, without vomiting. After the sixteenth dose the patient ate with relish chicken broth, slices white chicken meat, and drank a glass of wine, without vomiting. The drug was then withdrawn for a time, owing to an increased frequency of pulse and respiration; but hourly doses were subsequently given, with the result of entirely checking the vomiting and enabling the patient to regain her former strength.—*Edinburgh Medical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick headache as such is almost invariably cut sh by this plan, although some pain of a neuralg character remains in a few cases.— *N. Y. Me Journal.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, one ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

ANOTHER REMEDY FOR VOMITING OF PREGNANCY.

Still another remedy for this much medicated condition has been found in the hydrate of cocaine. When everything else had failed, when hope had fled and absorption seemed the only alternative, Dr. Holtz gave his patient a hypodermic injection of cocaine, and the vomiting ceased. The writer is happy to record the instance as one of the few in which cocaine has appeared to be good for anything, except for local anesthesia.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL AUGUST, 1886.

CANADIAN MEDICAL ASSOCIATION.

In another column we give a report of the meeting of the Association at Quebec on the 18th and 19th of August. For the greater portion of it we are indebted to the Philadelphia *Medical Times*. The number in attendance was not large, but it was representative. Ontario sent a good number of members, Toronto being well and ably represented. Montreal, considering the number of her leading medical men at present in Europe, had a good quoto present. Winnipeg sent an able representative in Dr. Kerr. The proceed-

ings were harmonious, and quite a number of interesting papers were read, especially in the Surgical Section. We were, however, sorry to find so many men, principably in the medical section, who were on the programme, as readers of papers, fail to put in an appearance. This is not right. If a member informs the Secretary of his intention to read a paper, he should make a point of being in attendance. The one regret of the meeting was the absence of the majority of the prefession of the city in which the meeting was held. Indeed very few put in an appearance. What reason they had for this action is, of course, alone known to themselves. It is true the Association went to Quebec without an invitation, and were, in consequence, quite prepared not to have any public hospitality extended to them. No fault, so far as we heard, was found for this break in the usual programme of the Association. But the absence from its meetings of the Quebec members was so marked as to call forth very general comment. The city, which nineteen years ago was the means of organizing this Association, was hardly expected to all but ignore the fact that it had again returned to the place of its birth. It was a very pleasant feature of the meeting the large number of representatives who were present from the United States, as also was the active part they took in the proceedings. Detroit, Buffalo, Ogdensburg, Portland, and Burlington, Vermont, had some of their ablest men in attendance. Hamilton is the next place of meeting, and we believe the decision is a wise one. Hamilton is centrally situated, and has a body of professional men who will appreciate the advantage of having the Association assemble in their midst. The enthusiasm of those who were present at this last meeting was very marked, and the determination was expressed, not to allow its partial failure to interfere in any way with the future success of the Association.

YELLOW FEVER AND ITS PREVENTION.

In this issue our readers will find a timely and highly important communication on the etiology, and prevention of yellow fever by inoculation. We are indebted to Dr. Gererd, for having prepared it as a special contribution to the RECORD, and to our old friend, Dr. Wolfred Nelson, late of Panama, South America, for its translation.

For many years—1826 to date—the city and Isthmus of Panama have been recognized hotbeds of yellow fever. In 1868 there was a serious epidemic in the city of Panama. It appeared again as an epidemic in 1880, and it remained endemic and endo-epidemic up to the summer, when, in May and June, it assumed the proportions of an epidemic of the first class, killing forty victims daily. This fact was first announced in the *New York Herald*, and later by the American papers generally in May. Later the *New York Herald* stated that the mortality of forty per diem understated the truth.

The filthy condition of the cities of Panama and Colon, in the American Isthmus, may be imagined, but the reality is almost incredible. The city of Panama—modern Panama—was built in 1688 as a strongly-walled, massively-constructed city. To-day, speaking of it and its suburbs—now extensive—it is without water supply or drainage, properly so-called. Its water is derived from deep wells, built by the early Spaniards, the majority on the outskirts of the suburbs. Three of the argest wells from which watermen purchase water lto sell in the city, are at Cocoa Grove. The wells are within three hundred feet of a new cemetery, they are in a ravine many feet below its surface, while they drain a level fully sixty feet below the cemetery. The cemetery is, without exception, the most flourishing bonanza in the Isthmus. The owner of the wells, Senor Don Nicanor Obcarrio, has a special concession from the Government of the State of Panama to bury the dead. Whether they are buried in his cemetery or in the foreign Jewish or Chinese cemeteries he exacts his fee. Regarding the cemetery, at the edge of the wells, between July 15th, 1884 and April 12th, 1886, it had actually received 3,884 bodies for interment in the ground, apart from several hundreds buried in the *bovedas* or stone vaults. In the month of November, 1884, the Canal Company alone buried 652 officers and men on the Isthmus, principally from yellow and malarial fevers, tropical dysentery, &c., &c. The Canal hospitals in Panama have had as many as seventeen deaths in a single day.

Such is Panama, well and fitly named the Gate to the Pacific, by Captain Bedford Pim, R.N., in one of his interesting books. The Isthmus of Panama is a constant producer and distributer of yellow fever. The Mexican West Coast epidemic of 1883 and 1884 was traced to a yellow fever corpse landed by a steamer from Panama.

That death has such a monopoly can easily be understood, when the drainage and water-supply, so-called, are considered. In both Panama and

Colon over-crowding has obtained, to an incredible extent, but in Colon the inhabitants have pure drinking water, and not cemetery drainage as in Panama. In Panama proper the natives throw all kinds of filth over the sea-walls ; as it is not washed away by the tides, there it remains, an insult to the eye, a foul, reeking, death-dealing mass. In the suburbs the inhabitants throw their excretæ and filth into lanes and vacant lots, this, plus heat and moisture generate poisons best left to the understanding of our *confreres*, God forbid that it should ever reach their nostrils. A few drains within and without the city are never flushed except by the rains. During the dry season, December to May, they are simply so many receptacles for excretæ. The odors that pour forth from them are unbearable.

It ceases to be a matter of wonder that, under such conditions, the Canal hospitals offered a rich field for clinical observation for Dr. Gererd and his Canal *confrères*. Drs. Meurrisse, Didier, Vernial and the late George W. Nelson.

Dr. Gererd's special observations on yellow fever and its specific microbe extended over three years. He had an able staff of assistants, and the finest of appliances that science could suggest, and it was his singular good fortune to recognize and isolate and cultivate the special microbe. Its propagation was brought about by Pasteur's well-known methods and apparatus.

With Dr. Gererd it was more than a mere matter of scientific enquiry pushed to a successful issue—with him it was a matter of absolute faith, and he abundantly proved it by inoculating himself with culture-microbes, and finally resorted to a crucial test, in allowing himself to be bitten by mosquitoes, that had just fed on a yellow-fever patient. Dr. Finlay, of Havana, we believe, was the first yellow fever expert to point out the propagation of yellow fever by mosquitoes. Dr. Gererd's experiments are a highly important contribution to tropical medicine. His three years of persistent labor were crowned with success, and he deserves all the praise that science and his Government (he is a Parisian) may accord him.

Yellow fever is one of those fearful scourges in whose dread presence physicians feel powerless. So little is known of the cause producing it and the great variety of treatments are a silent but tacit admission that our tropical *confrères* hitherto have been working in darkness, some epidemics killing 75 and 80 per centum, others 8 and 10. The last great epidemic at New Orleans and vicinity is credited with having swept away 30,000 victims.

Yellow fever on the Isthmus of Panama is nearly always fatal, that is, true specific yellow fever. Of twenty-seven admissions to the Canal hospital, Panama, for a series of weeks but one recovered.

The Dingler Expedition to Panama—fully endorses the above. M. Dingler, Chief of Works of the Panama Canal, accompanied by his wife, and family, in all a party of thirty-three, including Canal engineers, arrived at Colon on the 29th of October, 1883 ; up to January, 1885, or in fourteen months, fourteen of the party had had yellow fever with but a single recovery, M. Dingler losing his whole family, wife, son and daughter. The recoveries truly are the exceptions that prove the rule. The malignancy and intensity of the disease there destroys the blood. Intense malarial poisoning is supposed to be an important factor, no doubt increased by the unsanitary conditions already described.

Dr. Domingo Freire if we remember rightly, was the first observer to recognize a microbe in yellow fever and to conduct experiments and publish the results. One of his first contributions on this subject was translated from the Spanish by Dr. Wolfred Nelson, and published in the RECORD some three years ago. *Science* in a recent issue refers to Dr. Domingo Freire's excellent work at Rio de Janeiro, Brazil, and states that in 7,000 inoculations by him, only eight died of the disease, while 3,000 inoculated persons living under the same conditions were victims to the disease.

Dr. Joseph Holt, the very able and indefatigable President of the New Orleans Board of Health, whose quarantine regulations are undoubtedly the best known, recently has used his influence to secure the passage in Congress of a Bill to enable an American Commission to visit the yellow fever centres and study the disease, and the methods of skilled men like Dr. Domingo Friere and Dr. L. Gererd. Should the Commission verify the experiments of the gentlemen named, preventive medicine in the tropics will have entered on the grandest discovery of modern times, one that will protect millions of people.

The RECORD has been promised a series of original papers on yellow fever, by physicians of recognized standing in Brazil, Mexico, and at Panama. They will appear as received, as well as a series to be written in Cuba, the hot-bed *par excellence* of the disease.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, SEPTEMBER, 1886. No. 12.

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Quinine Treatment of Whooping Cough 605
Clinicle Lecture 607
Sciatica 607

CORRESPONDENCE.

Letter from Berlin 608
A visit to Pasteur's Institute, Paris .. 611

PROGRESS OF SCIENCE.

Ingluvin 613
Remarks on Incontinence of Urine in Children 614
Chronic Cystitis 616
Bleeding from the Nose, or Epistaxis 618
Should Poultices ever be used after an abscess or whitlow has been opened, or to aid the separation of sloughs? . 619
Nursing 620
The Dietary in Acute Diseases 622
The Treatment of Chronic Heart Disease 623
Treatment of the Hysterical Attack .. 623
Treatment of Pigment Spots of the Skin 624
Memorizing Doses 624
Efficient Sedative Cough Mixture 624
Dermatology 625

EDITORIAL.

College of Physicians and Surgeons, Province of Quebec 625
Officers of the International Medical Congress 626
The Origin of Scarlet Fever 626
Toronto Items 626
Personal 627
Reviews 627

Original Communications.

THE QUININE TREATMENT OF WHOOPING COUGH.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

Professor of the Theory and Practice of Medicine, Medical Faculty of Bishops' College.

[Read before the Canada Medical Association, Quebec, Aug. 18, 1886.]

I do not propose to enter upon a description of whooping cough, its history, etiology or sequelæ, but simply to make a few remarks upon a plan of treating the disease, which I have followed for the past seven years, and which has yielded me well nigh complete success. Although not usually a fatal disease, yet it is so prolonged, seldom lasting less than two months, and often continuing four to six months, with symptoms so distressing, especially to those whose duties bring them continually in contact with the little patients, that any plan of treating it with a more than usual amount of success, must be deserving of our best attention. It may, I think, be asserted with truth, that generally the family physician does not realize the torture which parents experience when the distressing spasms seize their children. The physician is too apt to look upon the disease as one that must run its course; and beyond giving an expectorant mixture, possibly containing some antispasmodic, and ordering some form of counter-irritation, is content to let time do most of the work. That under such treatment patients will get well, is doubtless true, but they do so, leaving behind a constitution sorely tried, sometimes all but completely wrecked. I, of course, am aware of the many remedies which have been suggested for the treatment of whooping cough. Thus I have tried hyosciamus, belladonna, the bromides, antimony, chloral, salicylic acid, and a host of others. I have used emetics of alum, ipecac, and sulphate of copper. But all have failed, as a rule, to give more than temporary relief. I have not been conscious of the disease being in any way cut short. In 1879, it so happened, that in my own family I had one of the worst cases of the disease it has ever been my lot to meet with. I tried several remedies without the slightest benefit. I consulted all the standard authorities within my reach, but got little information to satisfy me. I devoted some nights to hunting up articles on whooping cough in a variety of journals within my reach, but I did not meet with any satisfaction till I came across a paper in the Canada Medical Record for July, 1873, by Dr. Dawson, Professor of Diseases of children in the University of New York, on the treatment of whooping cough by quinine. In this paper it is stated that Dr. Binz, of the University of Bonn, was, in 1870, the first person to direct attention to this plan of treatment, and to state that it had yielded him invaluable results. He considered whooping cough to be a neurosis of the pneumogastric nerve, caused by infectious and irritating mucous, that has accumulated in the pharynx and larynx. By experiment he found that quinine destroyed, even when highly diluted, all structures found in normal mucus, and he presumed (and he says correctly) that it would do the same on the mucus of pertussis. In the American Journal of the Medical Sciences of 1871, there is a paper by Dr. Let-

SOME DETAILS OF UTERINE AND OVARIAN OPERATIONS.

He said the instruments used in these operations need not be numerous or complicated. After describing the usual precautions that should be taken regarding the cleanliness of hands, sponges, and instruments, he said that he prefers No. 1–20 shoemakers' thread to any other form of ligature. Before used the thread should be immersed for twenty-four hours in pure carbolic acid, and not put into water at all. In closing the abdominal wound, he uses silver wire for the deep sutures and horsehair for the superficial. He laid great stress on the importance of not enclosing any muscular tissue in the suture. The incision should be midway between the umbilicus and pubis, and should not extend to within one and a half inches of the pubis. He advised short incisions of one to two and a half inches. Muscle should never be cut in the incision, as it gave great trouble afterward

The pedicle of the tumor should be ligated in small segments, and the large vessels should be ligatured separately and the ligature cut short. The cavity of the abdomen should be thoroughly cleansed with sponges, and drained when necessary. He objects to abdominal bandages, and has only used them after the removal of the largest tumors. He allows his patient after the operation to move freely in bed; this favors the reposition of the bowels. In uterine fibroids, when large, he always divides the mass in the median line, then each half is enucleated. The stump should be cut in the shape of a V, and the edges brought together with a running suture and quilted with the shoemaker's stitch. He has found linseed-tea enemata of great service after operation; fomentations to the abdomen were also very beneficial. No after medicinal treatment is needed, except when there is vomiting; in this he has found sipping hot water useful, and also ipecacuanha in homœopathic doses. He uses the third dilution.

Dr. MACFARLANE, of Toronto, would have liked to hear Dr. Trenholme say more about dietetics. In his operation he had found vomiting to be a very troublesome complication; warm water with a flavoring of brandy he had found of great service in these cases, also frequent small doses of epsom salts as recommended by Lawson Tait. He never gave any medicine at all when there was any threatening of peritoneal trouble. He never used drainage unless the adhesions were extensive.

Dr. SHERMAN, of Ogdensburg, would like to have heard more details regarding the preparation of the patient, also as to whether he referred, when speaking of fibroids, to extra or intra-mural growths.

Dr. MACDONALD, of Wingham, Ontario, would like to have heard more details as to the closure of the wound, and also as to the value of the clamp in securing the pedicle, and whether operation for ovarian tumors should be performed early.

Dr. KERR, of Winnipeg, had seen hernia follow the operation, due to failure of union in central portions of wound. He would like to know why Dr. Trenholme objected to including muscle in his sutures.

Dr. SHEPHERD, of Montreal, thought that wounds of the abdomen are much the same as wounds of other parts, and that abdominal surgeons make a great ado about their special methods of healing this abdominal incision. General surgeons, who are operating every day in every part of the body, have no fear of including muscle in their sutures. He did not understand why an abdominal wound should heal so differently from wounds in other parts. So far as he himself was concerned, in performing abdominal section, he treated his incision as an ordinary wound. He used silk or catgut sutures and passed them through the whole thickness of the wall of the abdomen; union invariably took place by first intention. Every gynæcologist thinks it incumbent upon him to have some special mode of treatment of the abdominal incision, and seems to think that general surgical principles are not applicable to it. Dr. Shepherd had not much faith in ipecac used in the third dilution.

Dr. FENWICK said that he had operated a number of times for ovarian tumors with fair success. He agreed with the remarks of the last speaker. He always used silk sutures and objected to horsehair because knots made in it did not hold well. In treating the pedicle he first clamped it and then tied all the large vessels; afterwards, he tied the pedicle with the Staffordshire knot and removed the clamp. He had used hot water occasionally to cleanse the abdomen.

Dr. TRENHOLME, in reply, said he spoke of interstitial fibroids. He formed the pedicle out of the labial borders of the uterus in such a way that he left the broad ligaments to sustain the pelvic viscera. He used the shoemaker's stitch to secure primary union. With regard to the external wound he thought that the conditions found in the abdominal cavity existed nowhere else. It is of the greatest importance to secure primary union so

that there shall be no subsequent hernia. For vomiting he used hot water over the wound, and ipecac in minute doses. In preparing the patient he avoided purgatives as much as possible. In cold weather he kept the extremities of the patient wrapped up in cotton-wool.

Dr. SHEPHERD, of Montreal, next read a paper on

EXCISION OF THE TARSUS IN TUBERCULOUS DISEASE OF THE BONE.

He commenced by saying that formerly when there was carious disease of the bones of the foot the only resource was amputation,but with the advent of antiseptic surgery and the establishment of conservative principles of treatment, other methods of procedure have been adopted with success.

In cases of tuberculous and carious disease of bones the necessity for amputation is not immediate, and it is the duty of the surgeon to endeavor first to remove the local disease before sacrificing the foot. It is not necessary to perform a Hey's, Chopart's, or Syme's amputation in these cases, but merely to remove all the disease,however extensive The reader of the paper illustrated this principle by giving the histories of several cases. In one case, where there was disease of both feet, he removed on the right foot the cuneiform, scaphoid, cuboid, and bases of the metatarsal bones and on the left the lower end of the tibia, astragalus, part of the os calcis, the scaphoid, and cuboid. The result was excellent, and the patient, a girl aged seventeen, was able to walk about comfortably. In children it is often sufficient to remove the diseased portion with Volkmann's spoon, and in them amputation is hardly ever required.

Dr. MACFARLANE, of Toronto, had followed out the principle advocated by the reader of the paper for years. He believed it is the proper method of treatment, and should be extended to caries of the spine. In dressing the wound left after excising tarsal bones he never stuffed the wound with any thing, but placed the foot in a good position and left the rest to nature.

Dr. DUPUIS, of Kingston, said he recently had a case of disease of all the tarsal bones in which he performed amputation; afterward the tibia necrossed and he had to reamputate. He also reported a case of frost-bite in which he had removed the greater part of the tarsus.

Dr. HOLMES, of Chatham, remarked that Dr. Shepherd's paper was a good examplification of conservative surgery. He had several times excised the ankle-joint with the best results.

Dr. KERR, of Winnipeg, said that patients, after operation, should not be allowed to walk about too soon, as they were apt to have a splay foot. He did not believe in leaving the wound to nature altogether, but preferred keeping it in an aseptic condition.

Dr. RUSSELL, in Quebec, also insisted that the wound should be carefully protected, and that antiseptic dressings should be applied. If the wound were left to nature it would soon become putrid, and all the dangers incident to such condition would be incurred.

DR. FENWICK said he could mention a number of cases in which he had resected the tarsus with the happiest results. He related the case of a gentleman(a medical man) who had been wounded at the battle of the Alma, and had carried the bullet in his heel for nearly thirty years. The os calcis was trephined, and the bullet removed, with the result of a rapid closure of the cavity and a useful foot.

DR. KERR, of Winnipeg, read a paper on the

EVACUATION OF AN ABDOMINAL HYDATID CYST.

The patient was an Icelander, who came into the Winnipeg Hospital last winter with a large abdominal tumor. From the history, and as the result of exploratory puncture, the attending physician, Dr. Whiteford, made the diagnosis of hydatid cyst, and handed the case over to Dr. Kerr for operation. The operation was performed in two stages as recommended by Volkmann. A cut was first made down to the growth, and six day s after it was incised. To open the cyst he had to cut through two inches of the liver. The cyst was then emptied and washed out with a solution of iodine. The patient did well, and went home in two months. He marked that these are rare cases. Up to 1880, only 155 cases have been reported. This is the second case that has been in the University Hospital. The other patient was operated on but died on the table.

Dr. ECCLES, of London, Ont., related the history of a case which had been treated a year ago in the London Hospital.

THURSDAY, AUGUST 19TH.

Dr. KERR reported cases of

GUNSHOT WOUND OF THE HIP-JOINT.

Both cases were caused by the incidental discharge of small shot. The soft parts were much torn, the trochanters in both cases were split, and the joints laid freely open. In the first case the patient was not seen till three weeks after the

accident, and had had no treatment, his condition was deplorable. The whole wound was in a sloughy condition and horribly fetid. The patient was in a septic condition. The wound was thoroughly cleansed, the sphacelated portions freely excised, and the wound irrigated and packed with iodoform gauze; an anterior wire splint was also applied. The improvement at first was marked, but the patient died of septicæmia and exhaustion in a short time. The second case was seen immediately after the accident; the wound was treated in the same way, and the limb fixed in an anterior Smith's splint; a posterior splint was also employed, so that immobility was secured, and recovery with a useful limb resulted. Dr. Kerr referred to other methods of the treatmeat, viz., excision and amputation. In these cases the mortality was high. He brought these cases before the Section in order to show what could be done by conservative methods in such cases.

Dr. CLARKE, of Toronto, said that a number of cases of gunshot injuries of the hip were reported in the *Surgical History of the American Rebellion*. He had seen several cases treated when with the Federal army in Virginia. They were treated under canvas, and did well.

Drs. Russell, Fenwick, and Shepherd also joined in the discussion.

Dr. BULLER, of Montreal, read a paper on

THE TREATMENT OE ACUTE PURULENT OPHTHALMIA.

He remarked that eyes are now seldom lost in these cases, some use hot applications, others cold; some use astringents, others do not; some use antiseptics, others rely on frequent and thorough washings. All are agreed on the necessity of frequently cleansing the diseased eyes. Many remedies are used, as quinine, boracic acid, corrosive sublimate, etc. The antiseptic treatment is still on trial. Solutions used as germicides must be strong, weak solutions are of little value as antiseptics. He had lately treated three cases of acute gonorrhœal ophthalmia. He first used boracic acid, and afterward a solution of corrosive sublimate, the latter in the strength of 1 : 2000 without improvement, but the application of a solution of 1 : 1000 was followed by immediate and marked improvement. The patient was discharged cured in twenty-four days. In the other case the patient was a child, aged three years, with acute vaginitis; under similar treatment patient rapidly recovered.

In the third case, also one of genorrhœal opthalmia, there was sloughing of the cornea. He treated it by hot fomentations and washes of boracic acid and sublimate solution used warm. Improvement immediately followed, the slough separated and a clean ulcer was left which soon healed.

Dr. Buller thinks that in general practice a rigid cleanliness is not sufficiently carried out. With regard to cold applications, he thinks they are the best, but whilst applying them the cornea should be closely watched; if there is any cloudiness, hot applications should immediately replace the cold, and the cornea will be saved.

Drs. Smith, Russell, and Fenwick took part in the discussion which followed.

Dr. SHEPHERD, of Montreal, read the notes of a case of

AINHUM

which he had treated in the Montreal General Hospital. The disease affected the little toe of the right foot of a negro, æt. forty-seven, born in North Carolina. The little toe became affected some six years before. He first noticed a small ulcer on the digito-plantar fold, then a constriction surrounded the toe at this point which gradually deepened. The toe was much larger than normal. He suffered greatly when walking. The toe was amputated, and on dissection appeared to consist of much thickened skin and fibrous tissue. The bones of the toe were much atrophied and the joint had disappeared; the proximal phalanx looked somewhat like a claw. The reader of the paper then gave a short sketch of the history of the disease, saying it was first accurately described by Dr. Silva Lima, of Brazil, that it was a disease confined to the dark races, and was more common in some families and more in men than women. It sometimes affects the fingers and even limbs. The disease, if left to itself, lasts about ten years, and ends by amputating the member affected. The word "ainhum" is a negro word, and means "to saw."

Dr. FENWICK, of Montreal, reported a case of

AMPUTATION AT THE SHOULDER-JOINT FOR MYELO-SARCOMA OF THE ARM.

Patient, a woman, aged forty-seven years, seven months pregnant, came to Montreal General Hospital in the spring of the present year, with a large ulcerated tumor a little below the shoulder of the right arm, and a smaller tumor near the biceps. Two years ago she had received a blow, and within three weeks perceived a small lump at the site of injury. It grew rapidly and was removed. She was told that it was a fatty tumor. It soon return

d, and this time plasters were applied by a "cancer doctor," which burnt the tumor, and caused the ulcerated appearance which was seen when admitted to hospital. Dr. Fenwick amputated the arm at the shoulder-joint, and patient did remarkably well, never having a temperature higher than 99° F. On examination, the tumor proved to be a myeloid sarcoma. This was the first case Dr. Fenwick had seen in which the myeloid tumor first-affected the tissues external to the bone and periosteum.

Dr. A. LAPTHORN SMITH read a paper on

ALEXANDER'S OPERATION AND THE TREATMENT OF DISPLACEMENTS OF THE UTERUS.

After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments are really muscles, and are in a state of tension, except during coition. They are the homologues of the cremaster muscle in the male. Dr. Smith considered that the risks of the operation are great, and that it is not a justifiable one, except in extreme cases, and when performed did not permanently cure displacements of the uterus. He prophesied that it would soon fall into disuse. The author said that displacements of the womb could be corrected by lessening congestion, by keeping the liver clear and the lower bowel empty. The paper was illustrated by diagrams and tables.

Dr. TRENHOLME agreed with Dr. Smith that the operation was one that would soon be known only in history. He had operated once, but had failed to find the ligament. He, himself, many years ago, suggested a similar operation.

Dr. SHEPHERD had frequently dissected the round ligament, and had performed operations on the dead subject. The uterus could be easily elevated by pulling on the ligaments. He did not think the fact that a few muscular fibres had been found on the ligament proves that it is now in active use as a muscle; it is, rather, a fœtal remnant of the ligament of the Wolffian body, and the homologue of the gubernaculum testis of the male.

Dr. AHERN, of Quebec, said that the round ligament is frequently abnormal, and that at its insertion is often much atrophied. In cases where the the uterus is fixed, tightening it will not correct displacements.

The Section then adjourned.

OFFICERS ELECTED FOR NEXT YEAR:

President.—Dr. J. E. Graham, of Toronto.

Vice-Presidents.—For Quebec, Dr. Russell; *for Ontario*, Dr. Dupuis; *for Nova Scotia*, Dr. Wickwire; *for New Brunswick*, Dr. Currie; *for Manitoba*, Dr. Crowther.

Local Secretaries.—For Quebec, Dr. J. Bell; *for Ontario*, Dr. McKeough; *for Nova Scotia*, Dr. Trueman; *for New Brunswick*, Dr. Lunam; *for Manitoba*, Dr. Kerr.

Place of Next Meeting.—Hamilton; Chairman of Committee of Arrangements, Dr. Malloch.

Progress of Science.

THE TREATMENT OF OTORRHŒA.

Common as otorrhœa is very few physicians understand how to treat it intelligently and properly. The treatment is very simple and nothing is more satisfactory in its results.

Supposing that the otorrhœa is uncomplicated with fungous granulations or polypi, the ear is first cleansed with a syringe and warm water. Then it is to be dried out thoroughly by twisting a soft rag and passing it down to the bottom of the meatus so that it will absorb all moisture from the ear. Next sufficient boracic acid is put into the ear and worked down upon the drum so as to cover its surface. The powder should not be packed down upon the drum. It is allowed to remain there 24 hours, when the ear is again syringed, dried out, and the powder reapplied as before. The treatment must be repeated daily until all suppuration ceases. After that twice, or even once, a week is often enough to repeat the application. The dry powder must be applied to the ear for two or three weeks after all suppuration has ceased. This is the treatment of uncomplicated otorrhœa in a nut shell, and the result is nearly always very satisfactory. I have the common acid rubbed in a mortar till it assumes a granulated form, like granulated sugar, and use it in preference to the minuter powder of different firms, because it goes down to the bottom of the meatus easier and does not hang to the walls so persistently as the fine powder.

PRURITUS VULVA.

Martineau (*Annales Medico-Chirurgicales*) notes that this arises sometimes in the course of affections unconnected with the vulva, at others during the evolution of a disorder or lesion of this part. In the first class are intestinal worms, the oxyuris in particular; these wander at night over the neighborhood of the anus and genital organs. They should always be looked for there and then, especially in children, where there is an absence of any direct cause. Tinea tonsurans and the

pediculus pubis are other causes. Affections of the bladder, vegetations, and polypi of the urethra may lead to it. Glycosuria, also, either temporary in wet nurses, those who take much sugar, or permanent, as in diabetes. In the second category may be ranged pruritus, consecutive to various primary or secondary inflammations of the vulva, which may be simply local, or proceed from a general diathetic or constitutional cause, as tuberculosis, eczema, herpes, psoriasis, lichen, epithelioma. Vulva pruritus may be purely nervous, and then appears without any manifest lesion of the mucous membrane or skin; at times it may be associated with urticaria. The diabetic form is best treated with the effervescent citrate of lithia, with addition of a little arseniate of soda. Locally, during the acute stage, lotions of bromide of potassium or of chloral are recommended, and in the chronic phases a weak solution of corrosive sublimate and alcohol.—*Edinburgh Medical Journal.*

HYDROCHLORATE OF COCAINE IN THE VOMITING OF PREGNANCY.

Weiss, of Prague, has used this remedy successfully in case of vomiting in pregnancy which had resisted all previous attempts at relief. The patient was weak and anemic, of a certain disposition, and had suffered in three previous pregnancies from persistent vomiting: in the present pregnancy her condition was serious. Weiss described:

℞ Hydrochlorate of cocoaine.....gr. ij;
Alcohol, enough to dissolve.
Water..... ..... ʒ v.
S: One teaspoonful every half hour.

After the sixth dose three tablespoonfuls of milk were well borne; after the eighth, a cup of broth with egg, without vomiting. After the sixteenth dose the patient ate with relish chicken broth, slices white chicken meat, and drank a glass of wine, without vomiting. The drug was then withdrawn for a time, owing to an increased frequency of pulse and respiration; but hourly doses were subsequently given, with the result of entirely checking the vomiting and enabling the patient to regain her former strength.—*Edinburgh Medical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.— *N. Y. Med. Journal.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, one ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

ANOTHER REMEDY FOR VOMITING OF PREGNANCY.

Still another remedy for this much medicated condition has been found in the hydrate of cocaine. When everything else had failed, when hope had fled and absorption seemed the only alternative, Dr. Holtz gave his patient a hypodermic injection of cocaine, and the vomiting ceased. The writer is happy to record the instance as one of the few in which cocaine has appeared to be good for anything, except for local anesthesia.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL AUGUST, 1886.

CANADIAN MEDICAL ASSOCIATION.

In another column we give a report of the meeting of the Association at Quebec on the 18th and 19th of August. For the greater portion of it we are indebted to the Philadelphia *Medical Times*. The number in attendance was not large, but it was representative. Ontario sent a good number of members, Toronto being well and ably represented. Montreal, considering the number of her leading medical men at present in Europe, had a good quoto present. Winnipeg sent an able representative in Dr. Kerr. The proceed-

ings were harmonious, and quite a number of interesting papers were read, especially in the Surgical Section. We were, however, sorry to find so many men, principably in the medical section, who were on the programme, as readers of papers, fail to put in an appearance. This is not right. If a member informs the Secretary of his intention to read a paper, he should make a point of being in attendance. The one regret of the meeting was the absence of the majority of the prefession of the city in which the meeting was held. Indeed very few put in an appearance. What reason they had for this action is, of course, alone known to themselves. It is true the Association went to Quebec without an invitation, and were, in consequence, quite prepared not to have any public hospitality extended to them. No fault, so far as we heard, was found for this break in the usual programme of the Association. But the absence from its meetings of the Quebec members was so marked as to call forth very general comment. The city, which nineteen years ago was the means of organizing this Association, was hardly expected to all but ignore the fact that it had again returned to the place of its birth. It was a very pleasant feature of the meeting the large number of representatives who were present from the United States, as also was the active part they took in the proceedings. Detroit, Buffalo, Ogdensburg, Portland, and Burlington, Vermont, had some of their ablest men in attendance. Hamilton is the next place of meeting, and we believe the decision is a wise one. Hamilton is centrally situated, and has a body of professional men who will appreciate the advantage of having the Association assemble in their midst. The enthusiasm of those who were present at this last meeting was very marked, and the determination was expressed, not to allow its partial failure to interfere in any way with the future success of the Association.

YELLOW FEVER AND ITS PREVENTION.

In this issue our readers will find a timely and highly important communication on the etiology, and prevention of yellow fever by inoculation. We are indebted to Dr. Gererd, for having prepared it as a special contribution to the RECORD, and to our old friend, Dr. Wolfred Nelson, late of Panama, South America, for its translation.

For many years—1826 to date—the city and Isthmus of Panama have been recognized hotbeds of yellow fever. In 1868 there was a serious epidemic in the city of Panama. It appeared again as an epidemic in 1880, and it remained endemic and endo-epidemic up to the summer, when, in May and June, it assumed the proportions of an epidemic of the first class, killing forty victims daily. This fact was first announced in the *New York Herald*, and later by the American papers generally in May. Later the *New York Herald* stated that the mortality of forty per diem understated the truth.

The filthy condition of the cities of Panama and Colon, in the American Isthmus, may be imagined, but the reality is almost incredible. The city of Panama—modern Panama—was built in 1688 as a strongly-walled, massively-constructed city. To-day, speaking of it and its suburbs—now extensive—it is without water supply or drainage, properly so-called. Its water is derived from deep wells, built by the early Spaniards, the majority on the outskirts of the suburbs. Three of the argest wells from which watermen purchase water lto sell in the city, are at Cocoa Grove. The wells are within three hundred feet of a new cemetery, they are in a ravine many feet below its surface, while they drain a level fully sixty feet below the cemetery. The cemetery is, without exception, the most flourishing bonanza in the Isthmus. The owner of the wells, Senor Don Nicanor Obcarrio, has a special concession from the Government of the State of Panama to bury the dead. Whether they are buried in his cemetery or in the foreign Jewish or Chinese cemeteries he exacts his fee. Regarding the cemetery, at the edge of the wells, between July 15th, 1884 and April 12th, 1886, it had actually received 3,884 bodies for interment in the ground, apart from several hundreds buried in the *bovedas* or stone vaults. In the month of November, 1884, the Canal Company alone buried 652 officers and men on the Isthmus, principally from yellow and malarial fevers, tropical dysentery, &c., &c. The Canal hospitals in Panama have had as many as seventeen deaths in a single day.

Such is Panama, well and fitly named the Gate to the Pacific, by Captain Bedford Pim, R.N., in one of his interesting books. The Isthmus of Panama is a constant producer and distributer of yellow fever. The Mexican West Coast epidemic of 1883 and 1884 was traced to a yellow fever corpse landed by a steamer from Panama.

That death has such a monopoly can easily be understood, when the drainage and water-supply, so-called, are considered. In both Panama and

Colon over-crowding has obtained, to an incredible extent, but in Colon the inhabitants have pure drinking water, and not cemetery drainage as in Panama. In Panama proper the natives throw all kinds of filth over the sea-walls ; as it is not washed away by the tides, there it remains, an insult to the eye, a foul, reeking, death-dealing mass. In the suburbs the inhabitants throw their excretæ and filth into lanes and vacant lots, this, plus heat and moisture generate poisons best left to the understanding of our *confreres*, God forbid that it should ever reach their nostrils. A few drains within and without the city are never flushed except by the rains. During the dry season, December to May, they are simply so many receptacles for excretæ. The odors that pour forth from them are unbearable.

It ceases to be a matter of wonder that, under such conditions, the Canal hospitals offered a rich field for clinical observation for Dr. Gererd and his Canal *confrères*. Drs. Meurrisse, Didier, Vernial and the late George W. Nelson.

Dr. Gererd's special observations on yellow fever and its specific microbe extended over three years. He had an able staff of assistants, and the finest of appliances that science could suggest, and it was his singular good fortune to recognize and isolate and cultivate the special microbe. Its propagation was brought about by Pasteur's well-known methods and apparatus.

With Dr. Gererd it was more than a mere matter of scientific enquiry pushed to a successful issue—with him it was a matter of absolute faith, and he abundantly proved it by inoculating himself with culture-microbes, and finally resorted to a crucial test, in allowing himself to be bitten by mosquitoes, that had just fed on a yellow-fever patient. Dr. Finlay, of Havana, we believe, was the first yellow fever expert to point out the propagation of yellow fever by mosquitoes. Dr. Gererd's experiments are a highly important contribution to tropical medicine. His three years of persistent labor were crowned with success, and he deserves all the praise that science and his Government (he is a Parisian) may accord him.

Yellow fever is one of those fearful scourges in whose dread presence physicians feel powerless. So little is known of the cause producing it and the great variety of treatments are a silent but tacit admission that our tropical *confrères* hitherto have been working in darkness, some epidemics killing 75 and 80 per centum, others 8 and 10. The last great epidemic at New Orleans and vicinity is credited with having swept away 30,000 victims.

Yellow fever on the Isthmus of Panama is nearly always fatal, that is, true specific yellow fever. Of twenty-seven admissions to the Canal hospital, Panama, for a series of weeks but one recovered.

The Dingler Expedition to Panama—fully endorses the above. M. Dingler, Chief of Works of the Panama Canal, accompanied by his wife, and family, in all a party of thirty-three, including Canal engineers, arrived at Colon on the 29th of October, 1883 ; up to January, 1885, or in fourteen months, fourteen of the party had had yellow fever with but a single recovery, M. Dingler losing his whole family, wife, son and daughter. The recoveries truly are the exceptions that prove the rule. The malignancy and intensity of the disease there destroys the blood. Intense malarial poisoning is supposed to be an important factor, no doubt increased by the unsanitary conditions already described.

Dr. Domingo Freire if we remember rightly, was the first observer to recognize a microbe in yellow fever and to conduct experiments and publish the results. One of his first contributions on this subject was translated from the Spanish by Dr. Wolfred Nelson, and published in the RECORD some three years ago. *Science* in a recent issue refers to Dr. Domingo Freire's excellent work at Rio de Janeiro, Brazil, and states that in 7,000 inoculations by him, only eight died of the disease, while 3,000 inoculated persons living under the same conditions were victims to the disease.

Dr. Joseph Holt, the very able and indefatigable President of the New Orleans Board of Health, whose quarantine regulations are undoubtedly the best known, recently has used his influence to secure the passage in Congress of a Bill to enable an American Commission to visit the yellow fever centres and study the disease, and the methods of skilled men like Dr. Domingo Friere and Dr. L. Gererd. Should the Commission verify the experiments of the gentlemen named, preventive medicine in the tropics will have entered on the grandest discovery of modern times, one that will protect millions of people.

The RECORD has been promised a series of original papers on yellow fever, by physicians of recognized standing in Brazil, Mexico, and at Panama. They will appear as received, as well as a series to be written in Cuba, the hot-bed *par excellence* of the disease.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, SEPTEMBER, 1886. No. 12.

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Quinine Treatment of Whooping Cough 605
Clinicle Lecture 607
Sciatica 607

CORRESPONDENCE.

Letter from Berlin 608
A visit to Pasteur's Institute, Paris .. 611

PROGRESS OF SCIENCE.

Ingluvin 613
Remarks on Incontinence of Urine in Children 614
Chronic Cystitis 616
Bleeding from the Nose, or Epistaxis 618
Should Poultices ever be used after an abscess or whitlow has been opened, or to aid the separation of sloughs? . 619
Nursing 620
The Dietary in Acute Diseases 622
The Treatment of Chronic Heart Disease 623
Treatment of the Hysterical Attack .. 623
Treatment of Pigment Spots of the Skin 624
Memorizing Doses 624
Efficient Sedative Cough Mixture 624
Dermatology 625

EDITORIAL.

College of Physicians and Surgeons, Province of Quebec 625
Officers of the International Medical Congress 626
The Origin of Scarlet Fever 626
Toronto Items 626
Personal 627
Reviews 627

Original Communications.

THE QUININE TREATMENT OF WHOOPING COUGH.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

Professor of the Theory and Practice of Medicine, Medical Faculty of Bishops' College.

[Read before the Canada Medical Association, Quebec, Aug. 18, 1886.]

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Dr. Joseph Holt, the very able and indefatigable President of the New Orleans Board of Health, whose quarantine regulations are undoubtedly the best known, recently has used his influence to secure the passage in Congress of a Bill to enable an American Commission to visit the yellow fever centres and study the disease, and the methods of skilled men like Dr. Domingo Friere and Dr. L. Gererd. Should the Commission verify the experiments of the gentlemen named, preventive medicine in the tropics will have entered on the grandest discovery of modern times, one that will protect millions of people.

The RECORD has been promised a series of original papers on yellow fever, by physicians of recognized standing in Brazil, Mexico, and at Panama. They will appear as received, as well as a series to be written in Cuba, the hot-bed *par excellence* of the disease.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, SEPTEMBER, 1886. No. 12.

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Quinine Treatment of Whooping Cough 605
Clinicle Lecture 607
Sciatica 607

CORRESPONDENCE.

Letter from Berlin 608
A visit to Pasteur's Institute, Paris .. 611

PROGRESS OF SCIENCE.

Ingluvin 613
Remarks on Incontinence of Urine in Children 614
Chronic Cystitis 616
Bleeding from the Nose, or Epistaxis 618
Should Poultices ever be used after an abscess or whitlow has been opened, or to aid the separation of sloughs? . 619
Nursing 620
The Dietary in Acute Diseases 622
The Treatment of Chronic Heart Disease 623
Treatment of the Hysterical Attack .. 623
Treatment of Pigment Spots of the Skin 624
Memorizing Doses 624
Efficient Sedative Cough Mixture 624
Dermatology 625

EDITORIAL.

College of Physicians and Surgeons, Province of Quebec 625
Officers of the International Medical Congress 626
The Origin of Scarlet Fever 626
Toronto Items 626
Personal 627
Reviews 627

Original Communications.

THE QUININE TREATMENT OF WHOOPING COUGH.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

Professor of the Theory and Practice of Medicine, Medical Faculty of Bishops' College.

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accident, and had had no treatment, his condition was deplorable. The whole wound was in a sloughy condition and horribly fetid. The patient was in a septic condition. The wound was thoroughly cleansed, the sphacelated portions freely excised, and the wound irrigated and packed with iodoform gauze; an anterior wire splint was also applied. The improvement at first was marked, but the patient died of septicæmia and exhaustion in a short time. The second case was seen immediately after the accident; the wound was treated in the same way, and the limb fixed in an anterior Smith's splint; a posterior splint was also employed, so that immobility was secured, and recovery with a useful limb resulted. Dr. Kerr referred to other methods of the treatmeat, viz., excision and amputation. In these cases the mortality was high. He brought these cases before the Section in order to show what could be done by conservative methods in such cases.

Dr. CLARKE, of Toronto, said that a number of cases of gunshot injuries of the hip were reported in the *Surgical History of the American Rebellion*. He had seen several cases treated when with the Federal army in Virginia. They were treated under canvas, and did well.

Drs. Russell, Fenwick, and Shepherd also joined in the discussion.

Dr. BULLER, of Montreal, read a paper on

THE TREATMENT OE ACUTE PURULENT OPHTHALMIA.

He remarked that eyes are now seldom lost in these cases, some use hot applications, others cold; some use astringents, others do not; some use antiseptics, others rely on frequent and thorough washings. All are agreed on the necessity of frequently cleansing the diseased eyes. Many remedies are used, as quinine, boracic acid, corrosive sublimate, etc. The antiseptic treatment is still on trial. Solutions used as germicides must be strong, weak solutions are of little value as antiseptics. He had lately treated three cases of acute gonorrhœal ophthalmia. He first used boracic acid, and afterward a solution of corrosive sublimate, the latter in the strength of 1 : 2000 without improvement, but the application of a solution of 1 : 1000 was followed by immediate and marked improvement. The patient was discharged cured in twenty-four days. In the other case the patient was a child, aged three years, with acute vaginitis; under similar treatment patient rapidly recovered.

In the third case, also one of genorrhœal opthalmia, there was sloughing of the cornea. He treated it by hot fomentations and washes of boracic acid and sublimate solution used warm. Improvement immediately followed, the slough separated and a clean ulcer was left which soon healed.

Dr. Buller thinks that in general practice a rigid cleanliness is not sufficiently carried out. With regard to cold applications, he thinks they are the best, but whilst applying them the cornea should be closely watched; if there is any cloudiness, hot applications should immediately replace the cold, and the cornea will be saved.

Drs. Smith, Russell, and Fenwick took part in the discussion which followed.

Dr. SHEPHERD, of Montreal, read the notes of a case of

AINHUM

which he had treated in the Montreal General Hospital. The disease affected the little toe of the right foot of a negro, æt. forty-seven, born in North Carolina. The little toe became affected some six years before. He first noticed a small ulcer on the digito-plantar fold, then a constriction surrounded the toe at this point which gradually deepened. The toe was much larger than normal. He suffered greatly when walking. The toe was amputated, and on dissection appeared to consist of much thickened skin and fibrous tissue. The bones of the toe were much atrophied and the joint had disappeared; the proximal phalanx looked somewhat like a claw. The reader of the paper then gave a short sketch of the history of the disease, saying it was first accurately described by Dr. Silva Lima, of Brazil, that it was a disease confined to the dark races, and was more common in some families and more in men than women. It sometimes affects the fingers and even limbs. The disease, if left to itself, lasts about ten years, and ends by amputating the member affected. The word "ainhum" is a negro word, and means "to saw."

Dr. FENWICK, of Montreal, reported a case of

AMPUTATION AT THE SHOULDER-JOINT FOR MYELO-SARCOMA OF THE ARM.

Patient, a woman, aged forty-seven years, seven months pregnant, came to Montreal General Hospital in the spring of the present year, with a large ulcerated tumor a little below the shoulder of the right arm, and a smaller tumor near the biceps. Two years ago she had received a blow, and within three weeks perceived a small lump at the site of injury. It grew rapidly and was removed. She was told that it was a fatty tumor. It soon return

ed, and this time plasters were applied by a "cancer doctor," which burnt the tumor, and caused the ulcerated appearance which was seen when admitted to hospital. Dr. Fenwick amputated the arm at the shoulder-joint, and patient did remarkably well, never having a temperature higher than 99° F. On examination, the tumor proved to be a myeloid sarcoma. This was the first case Dr. Fenwick had seen in which the myeloid tumor first-affected the tissues external to the bone and periosteum.

Dr. A. LAPTHORN SMITH read a paper on

ALEXANDER'S OPERATION AND THE TREATMENT OF DISPLACEMENTS OF THE UTERUS.

After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments are really muscles, and are in a state of tension, except during coition. They are the homologues of the cremaster muscle in the male. Dr. Smith considered that the risks of the operation are great, and that it is not a justifiable one, except in extreme cases, and when performed did not permanently cure displacements of the uterus. He prophesied that it would soon fall into disuse. The author said that displacements of the womb could be corrected by lessening congestion, by keeping the liver clear and the lower bowel empty. The paper was illustrated by diagrams and tables.

Dr. TRENHOLME agreed with Dr. Smith that the operation was one that would soon be known only in history. He had operated once, but had failed to find the ligament. He, himself, many years ago, suggested a similar operation.

Dr. SHEPHERD had frequently dissected the round ligament, and had performed operations on the dead subject. The uterus could be easily elevated by pulling on the ligaments. He did not think the fact that a few muscular fibres had been found on the ligament proves that it is now in active use as a muscle; it is, rather, a fœtal remnant of the ligament of the Wolffian body, and the homologue of the gubernaculum testis of the male.

Dr. AHERN, of Quebec, said that the round ligament is frequently abnormal, and that at its insertion is often much atrophied. In cases where the the uterus is fixed, tightening it will not correct displacements.

The Section then adjourned.

OFFICERS ELECTED FOR NEXT YEAR:

President.—Dr. J. E. Graham, of Toronto.

Vice-Presidents.—For Quebec, Dr. Russell; *for Ontario*, Dr. Dupuis; *for Nova Scotia*, Dr. Wickwire; *for New Brunswick*, Dr. Currie; *for Manitoba*, Dr. Crowther.

Local Secretaries.—For Quebec, Dr. J. Bell; *for Ontario*, Dr. McKeough; *for Nova Scotia*, Dr. Trueman; *for New Brunswick*, Dr. Lunam; *for Manitoba*, Dr. Kerr.

Place of Next Meeting.—Hamilton; Chairman of Committee of Arrangements, Dr. Malloch.

Progress of Science.

THE TREATMENT OF OTORRHŒA.

Common as otorrhœa is very few physicians understand how to treat it intelligently and properly. The treatment is very simple and nothing is more satisfactory in its results.

Supposing that the otorrhœa is uncomplicated with fungous granulations or polypi, the ear is first cleansed with a syringe and warm water. Then it is to be dried out thoroughly by twisting a soft rag and passing it down to the bottom of the meatus so that it will absorb all moisture from the ear. Next sufficient boracic acid is put into the ear and worked down upon the drum so as to cover its surface. The powder should not be packed down upon the drum. It is allowed to remain there 24 hours, when the ear is again syringed, dried out, and the powder reapplied as before. The treatment must be repeated daily until all suppuration ceases. After that twice, or even once, a week is often enough to repeat the application. The dry powder must be applied to the ear for two or three weeks after all suppuration has ceased. This is the treatment of uncomplicated otorrhœa in a nut shell, and the result is nearly always very satisfactory. I have the common acid rubbed in a mortar till it assumes a granulated form, like granulated sugar, and use it in preference to the minuter powder of different firms, because it goes down to the bottom of the meatus easier and does not hang to the walls so persistently as the fine powder.

PRURITUS VULVA.

Martineau (*Annales Medico-Chirurgicales*) notes that this arises sometimes in the course of affections unconnected with the vulva, at others during the evolution of a disorder or lesion of this part. In the first class are intestinal worms, the oxyuris in particular; these wander at night over the neighborhood of the anus and genital organs. They should always be looked for there and then, especially in children, where there is an absence of any direct cause. Tinea tonsurans and the

pediculus pubis are other causes. Affections of the bladder, vegetations, and polypi of the urethra may lead to it. Glycosuria, also, either temporary in wet nurses, those who take much sugar, or permanent, as in diabetes. In the second category may be ranged pruritus, consecutive to various primary or secondary inflammations of the vulva, which may be simply local, or proceed from a general diathetic or constitutional cause, as tuberculosis, eczema, herpes, psoriasis, lichen, epithelioma. Vulva pruritus may be purely nervous, and then appears without any manifest lesion of the mucous membrane or skin; at times it may be associated with urticaria. The diabetic form is best treated with the effervescent citrate of lithia, with addition of a little arseniate of soda. Locally, during the acute stage, lotions of bromide of potassium or of chloral are recommended, and in the chronic phases a weak solution of corrosive sublimate and alcohol.—*Edinburgh Medical Journal.*

HYDROCHLORATE OF COCAINE IN THE VOMITING OF PREGNANCY.

Weiss, of Prague, has used this remedy successfully in case of vomiting in pregnancy which had resisted all previous attempts at relief. The patient was weak and anemic, of a certain disposition, and had suffered in three previous pregnancies from persistent vomiting: in the present pregnancy her condition was serious. Weiss described:

℞ Hydrochlorate of cocoaine.....gr. ij;
Alcohol, enough to dissolve.
Water..... ..... ʒ v.
S: One teaspoonful every half hour.

After the sixth dose three tablespoonfuls of milk were well borne; after the eighth, a cup of broth with egg, without vomiting. After the sixteenth dose the patient ate with relish chicken broth, slices white chicken meat, and drank a glass of wine, without vomiting. The drug was then withdrawn for a time, owing to an increased frequency of pulse and respiration; but hourly doses were subsequently given, with the result of entirely checking the vomiting and enabling the patient to regain her former strength.—*Edinburgh Medical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.— *N. Y. Med. Journal.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, one ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

ANOTHER REMEDY FOR VOMITING OF PREGNANCY.

Still another remedy for this much medicated condition has been found in the hydrate of cocaine. When everything else had failed, when hope had fled and absorption seemed the only alternative, Dr. Holtz gave his patient a hypodermic injection of cocaine, and the vomiting ceased. The writer is happy to record the instance as one of the few in which cocaine has appeared to be good for anything, except for local anesthesia.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL AUGUST, 1886.

CANADIAN MEDICAL ASSOCIATION.

In another column we give a report of the meeting of the Association at Quebec on the 18th and 19th of August. For the greater portion of it we are indebted to the Philadelphia *Medical Times.* The number in attendance was not large, but it was representative. Ontario sent a good number of members, Toronto being well and ably represented. Montreal, considering the number of her leading medical men at present in Europe, had a good quoto present. Winnipeg sent an able representative in Dr. Kerr. The proceed-

ings were harmonious, and quite a number of interesting papers were read, especially in the Surgical Section. We were, however, sorry to find so many men, principably in the medical section, who were on the programme, as readers of papers, fail to put in an appearance. This is not right. If a member informs the Secretary of his intention to read a paper, he should make a point of being in attendance. The one regret of the meeting was the absence of the majority of the prefession of the city in which the meeting was held. Indeed very few put in an appearance. What reason they had for this action is, of course, alone known to themselves. It is true the Association went to Quebec without an invitation, and were, in consequence, quite prepared not to have any public hospitality extended to them. No fault, so far as we heard, was found for this break in the usual programme of the Association. But the absence from its meetings of the Quebec members was so marked as to call forth very general comment. The city, which nineteen years ago was the means of organizing this Association, was hardly expected to all but ignore the fact that it had again returned to the place of its birth. It was a very pleasant feature of the meeting the large number of representatives who were present from the United States, as also was the active part they took in the proceedings. Detroit, Buffalo, Ogdensburg, Portland, and Burlington, Vermont, had some of their ablest men in attendance. Hamilton is the next place of meeting, and we believe the decision is a wise one. Hamilton is centrally situated, and has a body of professional men who will appreciate the advantage of having the Association assemble in their midst. The enthusiasm of those who were present at this last meeting was very marked, and the determination was expressed, not to allow its partial failure to interfere in any way with the future success of the Association.

YELLOW FEVER AND ITS PREVENTION.

In this issue our readers will find a timely and highly important communication on the etiology, and prevention of yellow fever by inoculation. We are indebted to Dr. Gererd, for having prepared it as a special contribution to the RECORD, and to our old friend, Dr. Wolfred Nelson, late of Panama, South America, for its translation.

For many years—1826 to date—the city and Isthmus of Panama have been recognized hotbeds of yellow fever. In 1868 there was a serious epidemic in the city of Panama. It appeared again as an epidemic in 1880, and it remained endemic and endo-epidemic up to the summer, when, in May and June, it assumed the proportions of an epidemic of the first class, killing forty victims daily. This fact was first announced in the *New York Herald*, and later by the American papers generally in May. Later the *New York Herald* stated that the mortality of forty per diem understated the truth.

The filthy condition of the cities of Panama and Colon, in the American Isthmus, may be imagined, but the reality is almost incredible. The city of Panama—modern Panama—was built in 1688 as a strongly-walled, massively-constructed city. To-day, speaking of it and its suburbs—now extensive—it is without water supply or drainage, properly so-called. Its water is derived from deep wells, built by the early Spaniards, the majority on the outskirts of the suburbs. Three of the argest wells from which watermen purchase water lto sell in the city, are at Cocoa Grove. The wells are within three hundred feet of a new cemetery, they are in a ravine many feet below its surface, while they drain a level fully sixty feet below the cemetery. The cemetery is, without exception, the most flourishing bonanza in the Isthmus. The owner of the wells, Senor Don Nicanor Obcarrio, has a special concession from the Government of the State of Panama to bury the dead. Whether they are buried in his cemetery or in the foreign Jewish or Chinese cemeteries he exacts his fee. Regarding the cemetery, at the edge of the wells, between July 15th, 1884 and April 12th, 1886, it had actually received 3,884 bodies for interment in the ground, apart from several hundreds buried in the *bovedas* or stone vaults. In the month of November, 1884, the Canal Company alone buried 652 officers and men on the Isthmus, principally from yellow and malarial fevers, tropical dysentery, &c., &c. The Canal hospitals in Panama have had as many as seventeen deaths in a single day.

Such is Panama, well and fitly named the Gate to the Pacific, by Captain Bedford Pim, R.N., in one of his interesting books. The Isthmus of Panama is a constant producer and distributer of yellow fever. The Mexican West Coast epidemic of 1883 and 1884 was traced to a yellow fever corpse landed by a steamer from Panama.

That death has such a monopoly can easily be understood, when the drainage and water-supply, so-called, are considered. In both Panama and

Colon over-crowding has obtained, to an incredible extent, but in Colon the inhabitants have pure drinking water, and not cemetery drainage as in Panama. In Panama proper the natives throw all kinds of filth over the sea-walls ; as it is not washed away by the tides, there it remains, an insult to the eye, a foul, reeking, death-dealing mass. In the suburbs the inhabitants throw their excretæ and filth into lanes and vacant lots, this, plus heat and moisture generate poisons best left to the understanding of our *confreres*, God forbid that it should ever reach their nostrils. A few drains within and without the city are never flushed except by the rains. During the dry season, December to May, they are simply so many receptacles for excretæ. The odors that pour forth from them are unbearable.

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The Dingler Expedition to Panama—fully endorses the above. M. Dingler, Chief of Works of the Panama Canal, accompanied by his wife, and family, in all a party of thirty-three, including Canal engineers, arrived at Colon on the 29th of October, 1883 ; up to January, 1885, or in fourteen months, fourteen of the party had had yellow fever with but a single recovery, M. Dingler losing his whole family, wife, son and daughter. The recoveries truly are the exceptions that prove the rule. The malignancy and intensity of the disease there destroys the blood. Intense malarial poisoning is supposed to be an important factor, no doubt increased by the unsanitary conditions already described.

Dr. Domingo Freire if we remember rightly, was the first observer to recognize a microbe in yellow fever and to conduct experiments and publish the results. One of his first contributions on this subject was translated from the Spanish by Dr. Wolfred Nelson, and published in the RECORD some three years ago. *Science* in a recent issue refers to Dr. Domingo Freire's excellent work at Rio de Janeiro, Brazil, and states that in 7,000 inoculations by him, only eight died of the disease, while 3,000 inoculated persons living under the same conditions were victims to the disease.

Dr. Joseph Holt, the very able and indefatigable President of the New Orleans Board of Health, whose quarantine regulations are undoubtedly the best known, recently has used his influence to secure the passage in Congress of a Bill to enable an American Commission to visit the yellow fever centres and study the disease, and the methods of skilled men like Dr. Domingo Friere and Dr. L. Gererd. Should the Commission verify the experiments of the gentlemen named, preventive medicine in the tropics will have entered on the grandest discovery of modern times, one that will protect millions of people.

The RECORD has been promised a series of original papers on yellow fever, by physicians of recognized standing in Brazil, Mexico, and at Panama. They will appear as received, as well as a series to be written in Cuba, the hot-bed *par excellence* of the disease.

THE CANADA MEDICAL RECORD.

VOL. XIV. MONTREAL, SEPTEMBER, 1886. No. 12.

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Quinine Treatment of Whooping Cough 605
Clinicle Lecture 607
Sciatica 607

CORRESPONDENCE.

Letter from Berlin 608
A visit to Pasteur's Institute, Paris. 611

PROGRESS OF SCIENCE.

Ingluvin 613
Remarks on Incontinence of Urine in Children 614
Chronic Cystitis 616
Bleeding from the Nose, or Epistaxis 618
Should Poultices ever be used after an abscess or whitlow has been opened, or to aid the separation of sloughs?. 619
Nursing 620
The Dietary in Acute Diseases 622
The Treatment of Chronic Heart Disease 623
Treatment of the Hysterical Attack .. 623
Treatment of Pigment Spots of the Skin 624
Memorizing Doses 624
Efficient Sedative Cough Mixture 624
Dermatology 625

EDITORIAL.

College of Physicians and Surgeons, Province of Quebec 625
Officers of the International Medical Congress 626
The Origin of Scarlet Fever 626
Toronto Items 626
Personal 627
Reviews 627

Original Communications.

THE QUININE TREATMENT OF WHOOPING COUGH.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

Professor of the Theory and Practice of Medicine, Medical Faculty of Bishops' College.

[Read before the Canada Medical Association, Quebec, Aug. 18, 1886.]

I do not propose to enter upon a description of whooping cough, its history, etiology or sequelæ, but simply to make a few remarks upon a plan of treating the disease, which I have followed for the past seven years, and which has yielded me well nigh complete success. Although not usually a fatal disease, yet it is so prolonged, seldom lasting less than two months, and often continuing four to six months, with symptoms so distressing, especially to those whose duties bring them continually in contact with the little patients, that any plan of treating it with a more than usual amount of success, must be deserving of our best attention. It may, I think, be asserted with truth, that generally the family physician does not realize the torture which parents experience when the distressing spasms seize their children. The physician is too apt to look upon the disease as one that must run its course; and beyond giving an expectorant mixture, possibly containing some antispasmodic, and ordering some form of counter-irritation, is content to let time do most of the work. That under such treatment patients will get well, is doubtless true, but they do so, leaving behind a constitution sorely tried, sometimes all but completely wrecked. I, of course, am aware of the many remedies which have been suggested for the treatment of whooping cough. Thus I have tried hyosciamus, belladonna, the bromides, antimony, chloral, salicylic acid, and a host of others. I have used emetics of alum, ipecac, and sulphate of copper. But all have failed, as a rule, to give more than temporary relief. I have not been conscious of the disease being in any way cut short. In 1879, it so happened, that in my own family I had one of the worst cases of the disease it has ever been my lot to meet with. I tried several remedies without the slightest benefit. I consulted all the standard authorities within my reach, but got little information to satisfy me. I devoted some nights to hunting up articles on whooping cough in a variety of journals within my reach, but I did not meet with any satisfaction till I came across a paper in the Canada Medical Record for July, 1873, by Dr. Dawson, Professor of Diseases of children in the University of New York, on the treatment of whooping cough by quinine. In this paper it is stated that Dr. Binz, of the University of Bonn, was, in 1870, the first person to direct attention to this plan of treatment, and to state that it had yielded him invaluable results. He considered whooping cough to be a neurosis of the pneumogastric nerve, caused by infectious and irritating mucous, that has accumulated in the pharynx and larynx. By experiment he found that quinine destroyed, even when highly diluted, all structures found in normal mucus, and he presumed (and he says correctly) that it would do the same on the mucus of pertussis. In the American Journal of the Medical Sciences of 1871, there is a paper by Dr. Let-

zerich, of Germany, in which he advances a theory regarding whooping cough, which would seem to indicate quinine as scientific treatment for the disease. In this paper he says he has discovered a fungoid growth which vegetates in the epithelium of the air passages, and by its irritation causes the convulsive attacks of coughing. He says that the expectorated mucus of whooping cough patients contains masses of brownish red spores with occasional threads of mycelium. These spores he introduced into the trachea of rabbits, and in a short time they became affected with a noisy and violent cough identical with that of whooping cough. These rabbits were killed, and the mucus in the air passages examined, and it was found to contain precisely the same spores, as he found in the sputa of human subjects with pertussis. Writing of the quinine treatment, Dr. Dawson says: "If the Fungus theory of Dr. Letzerich be correct, I can readily account for the destructive influence of quinine on fungoid development. Its power consists in removing the cause of local irritation, which gives rise to reflex phenomena, evidenced by the whoop. For my part I consider pertussis an affection of the mucus membrane of the pharynx and larynx, and the "whooping" as simply reflex. I do not consider the rapid cure affected by quinine due to the simple distruction of the fungus, but also to its nauseating bitter taste. In whooping cough there is an abnormal secretion of thick tenacious mucus from the mucus membrane of the pharynx, which may or may not excite a paroxysm, but which certainly aggravates and prolongs it. This is proved by the fact that the moment this mucus is removed by either coughing or vomiting the paroxysm ceases. The effect of the quinine in solution, when swallowed is instantly, from its bitter taste, to excite a free secretion of thin mucus from the bucal mucus membrane and salivary glands. This softens and renders easy of dislogement the thick tenacious mucus lodged in the pharynx. The frequent use of this quinine keeps up this action, and in a short time there is no accumulation of the thick tenacious mucus, so that with each act of coughing the mucus is readily loosened and expectorated. Now as to the method of administering the drug. I would wish to direct very particular attention to this portion of my paper, because in Professor Peppers' late work, just completed, in the article on Pertussis it is said: "Quinine may be given in solution, combined with simple syrup, liquorice also disguises the taste admirably for children." I am sorry to see in so recent an article, and in so able a work, advice so pernicious and so calculated to bring discredit on the quinine treatment. Let me state most emphatically that if good results are desired, the quinine must not be disguised in any shape or form, nor must anything be given for several minutes afterwards, having this object in view. If there is one point on which all advocates of this treatment are agreed it is that it must be given pure and alone. Wherever I have found apparent failure attend the use of this drug, it has been when parents have disregarded my express instructions on this point.

The directions for the quinine treatment may be tabulated as follows:

1. Give the quinine (sulphate preferable) dissolved by and in pure water. For children under three years from gr. ii. to gr. viii., and for older children and adults from gr. x to gr. xl, to the ounce of water.

2. Give not less than one teaspoonful every hour, or at longest every 2 hours, during the day, and several times during the night.

8. Give nothing with or afterwards for at least five minutes to destroy the taste or wash out the mouth.

4. Continue to give it although the first few doses may be vomited; repeat it at once.

5. Be sure that the quinine is pure and that it is thoroughly dissolved.

I have now the notes of over one hundred cases of whooping cough treated by quinine. This embraces all the cases which have come under my care, since 1879, and I have yet to meet with a failure. Some have been longer than others in yielding, but as a rule within a week, the effect is most evident, and, as a rule, you can procure a perfect cure in at most a month. In conclusion allow me to give you brief notes of three cases. One, my first case, that of my own child; the last two within the last three months.

F. W. C. attacked with a harsh cough January 26, 1879. On February 2, the true character of the disease was manifest, the following day the paroxysms were intense and frequent. Feb. 4. Got his first dose of quinine at 9 a.m. During the following night the paroxysms were less numerous and decidedly less severe. Feb. 6. Passed an excellent night, although he coughed several times. From this to February 27, he steadily improved, and by the first of March was quite convalescent.

On the 14th of May this year I was asked to see three children in the family of Mr. W. O., who all had had whooping cough, well marked, for a week. From the description given by the mother, on my visit, they were all rather severe cases. The disease had been contracted from the child of their next door neighbor, who had already had it for over a month, and the doctor of this child was treating it on the "do nothing plan." I placed them on quinine, and within 48 hours the relief in the words of the mother was "wonderful." On the 1st of the present month of August, I was asked to visit at St. Johns, 26 miles from Montreal, a little girl 8 years old, the child of Capt. D., formerly of the Royal Canadian Rifles. She had had whooping cough since the middle of July, and had wasted to almost a shadow. The mother described the paroxysms as "frightful." They occurred every couple of hours during the day, and at night were so incessant, that for at least two weeks the child had positively hardly got any sleep. I ordered her one grain of quinine every two hours. On the 7th of August, there being no perceptible improvement, I was again requested to see her. They begged me to give her something else, something that would relieve her, at once, for they thought she could not live many days if the paroxysms continued as they had been. The child certainly was the worst wreck from whooping cough I had ever seen. My faith in quinine was however firm. I therefore simply doubled the dose of quinine, giving her 2 grains every 2 hours during the day, and at least twice during the night. On the 12th of August I again saw her, and the report then was, the first dose of the stronger medicine showed a beneficial result, in a slight dimunition in the intensity of the paroxysm. On the night of the 11th of August, the child went to bed at 7 o'clock and slept without waking and without a paroxysm till 5 a.m., when she had had a slight one. I saw her at 6 p.m., and during the day she had had only three slight attacks since 5 a.m. The effect of the medicine was in the words of the mother "wonderful." As might be anticipated from the quantity of the drug taken, the child complained of some headache, and slight noise in the ears. I ordered the medicine to be continued at intervals of 4 hours. In some, in fact in most cases, difficulty is experienced in getting the child to take the medicine. If the child is young, I simply insist upon the medicine being given forcibly and although at first this is done reluctantly by the mother, she so soon sees the resulting benefit to the child, that she willingly perseveres; when the child is old enough to realize the benefit it is receiving, I do not unfrequently find them ask for the bitter medicine.

So little is found in works on practice concerning this method of treating whooping cough, that I felt the meeting of our Dominion Association was a good place to direct the attention of the profession to it. In conclusion, I may say that within a year or two, the last being in the Philadelphia Medical Reporter of the 31st of July, several short papers have appeared advising the injection of quinine in solution by means of an ordinary syringe against the posterior wall of the pharynx. A Dr. Kohtonetz in the *Deutsch Med. Zeitung* of June 17th, 1886, advises the following solution to be used in this way or in the form of spray, for a child 3 or 4 years old.

℞	Quinine Sulphates	gr. lxiv.
	Acid Sulphuric	gtt. xxxii.
	Aquæ destillated	ʒ vi.

I see no advantage in its being employed in this way, and its application in this manner is certainly attended with even much greater difficulty than giving it in solution in the ordinary way.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, March 2nd, 1886.

By Francis W. Campbell, A.M., M.D., L.R.C.P.L. Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

SCIATICA.

The patient now before you, gentlemen, came to the out-door room about five days ago, in much the same condition as you see him now. Body slightly flexed on the thigh, and the leg upon the thigh, and complained of severe pain, in the lumbar muscles and especially along the course of the sciatic nerve. He was ordered five grains of iodide of potash thrice daily, and directed to return yesterday. This he did, and I had his case taken for me by Mr. Vidal. His name is Patrick O'Connor, and his age 47. In his family history we do not find any heriditary tendency to any particular disease. He has been in Canada for thirty-six years, and has always worked as a laborer —being much exposed to extremes of heat and cold—but he has never specially worked with wet feet. His health has been uniformly good, until

his present attack, which came on five weeks ago, quite suddenly. He went to bed in apparent health, and awoke during the night with a violent shooting pain; partly in the small of his back, but most violent over the right sacro-ischiatic notch (from which emerges the sciatic nerve), and extending down the posterior, and outer part of the right thigh. He tried several household remedies, but without success, and for three weeks he informs me, he has neither gone to bed, or taken his clothes off. This is because the pain is considerably aggravated upon his lying down. He also complains of some loss of sensation in the leg, and on testing this point yesterday I concluded that to a certain extent sensation was dulled. He says the leg feels numb and heavy and has a feeling of stiffness. The pain, although constant, has paroxysm of intensity, when it is of a lancinating or tearing character, and in these paroxysms changes its position frequently. Yesterday I gave him Potash Iodide ʒ ii. Pot. Bi. C. ʒ iv. Vin. Colchci. ʒ iv. Aquæ ℥ vi. ʒ ij. ter in die. The conclusion I have come to is that this patient is suffering now from a form of sciatica; although at first it seems to have been accompanied by decided lumbago. This, however, is not an unusual occurrence, very often an attack of lumbago preceeds the sciatica, and the pain gradually works its way till it settles in the sciatic nerve. The disease is a neurosis—but constitutional predisposition has less to do with it than with any other form. It is caused by cold and dampness, to sitting on anything that compresses the nerve—excessive walking, and constipation. The sufferings in this disease are sometimes very great and it is very rebellious to treatment.

Treatment. If the cause is known it must be removed. Constipation will require active purgation. In cases where the attack has commenced with lumbago, the Turkish bath is especially useful. The hypodermic injection of morphine 1-6 to ¼ of a grain with the 1-120 to the 1-100 of solution of atropia has been found very serviceable. The deep injection in chronic cases of five to ten minums of chloroform is highly spoken of. The needle should be inserted, where the pain is most severe. Ether may be used but is less effective. Galvanism is advised, apply one electrode near the exit of the nerve from the pelvis and the other below. A powerful current must be used. The application of the hot hammer or button is often very successful. Blisters along course of the nerve and the raw surface dressed with morphia. The warm pack is advised. It should be worn all night. In chronic cases with a rheumatic history iodide of potash, guiacum and turpentine should be given. [This patient made a rapid recovery and was subsequently presented to the class.]

Correspondence.

LETTER FROM BERLIN.

Editors CANADA MEDICAL RECORD.

SIRS,—The University of Berlin still controls the teaching of medicine in that city, although special hospitals and specialists have arisen from whom the student may derive valuable additions to his knowledge.

With these occasional exceptions, however, the professors in the University and their assistants form the principal means by which the hospital advantages of the German Capital are made available. There are accordingly few courses which the student of medicine or surgery does not take as a *bona fide* matriculant of the University, and if he wishes to be properly accredited it is the usual course to pursue. He will attend the regular professional lectures and the subsidiary classes of the assistants in whatever branch or branches he may decide to learn. And the first thing that will strike him will be the difficulty of getting precise information regarding the men and things he will be the most curious about. The German student probably knows as much as the English or American, but he concentrates it upon one or two objects. He knows, for example, a great deal about methods in surgery, but he is ignorant about the hour at which Leyden lectures on medicine or whether Henoch discourses about children on Wednesdays or Saturdays. It may seem a trivial matter, but there appears to be no central office of enquiry, no notices in a porter's lodge—no reliable indication of the time, place and immediate whereabouts of the various lectures, demonstrations, etc., whereby a stranger may regulate his search for information in medical Berlin. Nor is there much use in enquiring of the students that are everywhere to be found about the hospitals and University buildings. They would doubtless tell you, with their proverbial politeness, if they knew, but the truth is they simply don't know. Fortunately few Americans will visit Berlin without finding a sufficiently communicative soul in some fellow-

student of his own country, but in any event I would advise everyone who thinks of visiting the city to take with him that useful book "Berlin as a Medical Centre;" and, although I was informed by a native Berlin bookseller (who will shortly publish a similar work of his own), that Dr. Bigelow's book is "full of errors," yet much time and labor will be saved by the perusal of some such guide. Most of the German professors and their assistants speak English, but I would strongly urge upon students visiting Germany the necessity of learning enough German before leaving home to enable them to carry on ordinary conversation and to read the language fairly well. Having made this advance the visit will be infinitely more profitable and satisfactory than if he knows nothing of the language.

In pleasing contrast with the hospitals and schools of instruction of London and other medical centres, the visitor will not be obliged to spend such a large share of his time in going from one place to another widely separated from it. The methods of transit are also convenient, clean and rapid, a very noted difference from those of the English metropolis. As I mentioned in my letter from London, it is a hardship and a great loss of time to have to transport oneself from, say, Mr. Treves' Clinic at the London Hospital, in the east end of the city, some five miles to listen to a teacher, or to see an operation in the Soho Square Hospital, or shortly afterwards to make a pilgrimage to Guy's or St. Thomas'. With, perhaps, the exception of Koch's department (the Hygienishe Institut in the Klosterstrasse), the buildings of medical interest are all within a few minutes walk of the *Charité*, the great hospital of some 1,500 beds, where all the medical and many surgical cases are treated.

The medical visitor to Berlin, be he transient or otherwise, should have his head-quarters near this extensive collection of buildings. He will find that he must rise early, if he wishes to make the most of his time, because several lectures and demonstrations begin as early as seven o'clock; at eight o'clock everything is in full swing, and by two p.m. the *dies medicus* is far spent. The origin of this early rising I could not trace, but I think it is preferable to our later hours. How the careless, beer-drinking and café-loving German feels like rising with the lark I cannot understand. Certain it is that he spends little time over his breakfast, that shadowy repast composed of a cup of coffee, rolls and butter, and is on hand while the English student would be debating the momentous question; "to rise or not to rise?"

The major portion of American visitors to the German capital will like to see and hear all the men whose names are equally well-known in America as in their own land. Now, as ten years ago, Virchow is still the most prominent figure—*primus inter pares*—in the University group, and one looks with some wonder at the enthusiastic old (and yet, as far as energy and vivacity are concerned, one of the youngest) gentleman whose lectures on pathology still attract pupils from all parts of the world.

I would strongly advise the visitors to Berlin to make an early start and see how students are taught to make *post mortems* at the *Charité*. The supply of material, as one might expect from a hospital of this size, is practically unlimited, and it is judiciously utilized. Two of Virchow's assistants are almost constantly in attendance, and the student is taught practical pathology as he is instructed in practical anatomy in our dissecting rooms.

It will be seen at once the very great advantage in the way of teaching possessed by a concentration of material, such as we find in the *Charité*, over the scattered hospital system prevalent in London, New York and other medical centres. See the number and variety of illustrations possible in the lectures of Prof. Virchow, for example. He can draw not only from the *Charité*, but from any or all of the clinics connected with the University, and the result is that one of his lectures which I heard him deliver upon that comparatively rare disease—trichinosis—was profusely illustrated both by fresh and microscopical sections and preparations from patients lately dead in the hospital. So, too, with all the clinics, surgical and medical. The plan of centralization, doubtless a part of that military system which everywhere obtrudes itself upon the stranger, whatever disadvantages it may have for the patient, and however unsuitable to England and Canada, will commend itself to him who has tried both plans.

Schroeder's quarters are the *Universitat Frauen Klinik*, a beautiful modern building of brick—and they are well worth a visit. I suspect that the female patients are treated something after the *vile corpus* style of our forefathers. Prof. Schroeder gave a very lucid and well delivered lecture upon dislocations of the uterus, taking for his text a patient upon the table. The woman was examined in turn by some half dozen students called from the auditorium

and then each was questioned by the lecturer. A very good thing for the students doubtless, but it struck me as being unjustifiable to keep a patient under chloroform for an hour just to demonstrate the existence of a uterine retroflexion to a class of students.

The anæsthetic preferred here is almost universally chloroform or a mixture of chloroform and ether, or of ether, chloroform and alcohol in varying proportions.

The apparatus for administration is usually an extremely simple one, and I must say that I saw, during the short time I was able to give to operative performances, no ill or even disagreeable results from its administration.

Those who are interested in chemistry or in its applications to pharmacology and other departments of scientific medicine should not forget that the veteran teacher and scientist, the renowned Hofmann, still lectures and carries on original work with his old-time fire and enthusiasm at the chemical laboratory, No. 35 Georgen Strasse. His laboratory is well worth a visit, as a place where much of the world's knowledge of chemistry in all its important branches has been, is, and will probably long continue to be acquired. Those who are interested in operative surgery will find in Bergmanns Klinik enough to satisfy the most exacting. I may be forgiven the expression when I say that every stranger feels as if he were in a human slaughter-house when he has been half an hour in the professor's large and handsome operating theatre. I have myself seen on its floor at one time as many as five patients in the different stages of primary chloroformization, operation, and having their surgical wounds dressed by assistants, or of having some minor detail of an operation attended to by the first or second assistant. Again, one sometimes gets the impression that here the male patients, too, are treated as material "*in a pathological condition.*" I do not wish it to be supposed that there is any evidence of carelessness; indeed I have every reason to think that the results are quite equal to those obtained in our best English hospitals. Some form of antiseptic treatment is believed in and is universally employed. The antiseptic in which most faith is reposed is mercuric chloride with iodoform as an adjunct and carbolic acid for immersion of instruments. I might add here that Leiter of Vienna manufactures blunt instruments (forceps, for example) covered with vulcanite, so that they can be immersed in the corrosive solution without injury.

I heard Henoch (a comparatively young man) give one of these lectures on children for which he is famous. The subject was *trismus neonatorum*, a very uncommon affection with us, and yet there seemed to be no trouble in getting subjects from the *Charité*.

Of all the members of the Berlin Medical Faculty the weakest lecturer is Koch. He may be described as a young man with a rapid, uncultivated delivery, doomed to lecture on a subject notoriously unpopular with students—hygiene—and yet the hygienic institute has a museum better fitted up for teaching purposes, as far as I know, than any other in the world. The models of life-saving and accident preventing appliances for workshops and factories alone fill three large rooms, and the taking of his class through them and explaining all these varied apparatus would be more likely to teach them the value and scope of a knowledge of sanitary science than all the learned but somniferous lectures he could deliver. Quite different is it with his world renowned laboratory, where the study of bacteriology is pursued. Here the cultivation of micro organisms and the study of their behavior under various influences are carried on by the aid of his assistants and as many students as can be accommodated. The work in this new department is one of the most important that can occupy the attention of the scientific student, and there is no place in the world where it can be more thoroughly and more satisfactorily performed than here.

In the department of medicine Leyden is perhaps the best man to listen to, and I would advise anyone interested in ophthalology to attend the Augen Klinik of Prof. Schweigger. I fear that I shall no longer be able to meet that popular superstition —that the eye can be turned out upon the cheek, suffer some operative interference and then be returned to its normal position in the orbit—with a stern denial, because I have myself seen it done. Those who do not interest themselves in the reply to the question; "what shall be done with a lost eye?"—are perhaps not aware that optic neurotomy, followed by replacement of the ball, is one of the plans devised to prevent the dangers of sympathetic ophthalmia in the sound eye, and the inconvenience of a glass eye after the useless organ has been removed. The internal rectus is severed, the conjunctive cut through sufficiently to allow of the division of the optic nerve close to the fora-

men, the globe is turned out, the nerve a second time cut flush with the eye ball, and the latter returned to its place. The divided muscle is sutured, the conjunctival wound sewed up, the palpebra stitched together, and, if the operation is a success, the patient is eventually able to command movements in the sightless globe just as formerly.

This by no means completes the list of the Faculty, but it comprises nearly all those whom I was able to see and hear with my own eyes and ears, and that, as I promised you, is all I shall speak about. The other members of the Faculty, most of whom have their lecture rooms in the *Charité* can be heard and seen during the session, and their names will of course occur to the reader of these notes, but owing to the lectures and demonstrations taking place in some Kliniks at the same hour it is extremely difficult to see every one in a comparatively short time.

The absence of any adequate inspection of meat at *our* public abbattoirs, and the crying necessity for it, render doubly interesting a visit which I paid to the Central Viehof in Berlin, where things are conducted in a style and upon a scale worthy of a civilized people. Here all (or nearly all) the meat sold for food in Berlin and the surrounding country undergoes a strict macro—and microscopical examination by competent veterinary surgeons. That the inspection of food may be carried on with as little inconvenience and loss as possible the wholesale markets are situated in the Viehof grounds and half the market value of animals condemned by the inspectors is paid the owner by the Government. The loss of the other half will doubtless have a salutory effect upon that too large class of careless, ignorant and wilfully culpable stock raisers and butchers who expose for sale diseased animals. Every animal destined for the market is examined before and after death. Having passed the first examination and been killed the meat is now carefully examined a second time, and divided as to quality into first, second and third class. Suspected portions are put aside to be subsequently examined by competent microscopists. *Every hog is microscopically examined*, peices being taken from the ham, neck and the central tendon of the diaphragm, the commonest seats of the trichinia. Of course to make this examination thorough and valuable a large staff is requisite. In the inspection department there are about 25 veterinary surgeons, 100 microscopists and sub-inspectors, and the supervising pathologist, whose decision in cases of doubt is final. We were shown a large number of samples of diseased meat, and came away feeling that the man who eats uninspected meat often eats "trash," and that it is safer in countries like the Province of Quebec to be strictly vegetarian in one's habits. This is a subject upon which the veterinary and medical profession might well join hands, and I am sure the medical man who follows the courses of the magnificent Thierartznei Schule will see what advances the veterinary art has made in Germany. I met many Canadian students in Berlin and to several of them, taking special University courses, I am deeply indebted for acting as my cicerones while in the pursuit of information relative to things medical in Berlin. Dr. J. J. Gardner is steadfastly pursuing his study of ophthalmology; Dr. Ruttan in Hoffman's laboratory; Dr. McConnell studies the doings of micro-organisms in Prof. Koch's laboratory, while Mr. Clements, well known in Montreal, is a student of veterinary medicine and surgery in the fine school I have just referred to.

My next letter, I hope, will be written in or at least about Vienna.

C. A. W.

BERLIN, July 12, 1886.

A VISIT TO PASTEUR'S INSTITUTE, PARIS.

Editors MEDICAL RECORD.

The universal interest which at the present time attaches to the methods discovered by Mr. Pasteur, and now practised by his institute in Paris, for preventing the development of hydrophobia, makes a visit to his institution a great privilege, and one not less gratifying, than that of seeing the work done in the excellent hospitals of Paris or viewing the magnificent architecture of its public buildings and the profuse evidence of the sculptors' skill in their ornamentations and in the numerous statues, arch de triomphe and columns; or its unrivalled art galleries, palaces, boulevards, and opera house. I learned from Dr. Rodier, who is the Canadian representative there, that, owing to the number of patients coming for treatment, new and larger apartments had been opened a day or two before, on Rue Vacquelin. We proceeded there in the morning.

"The inoculations take place at 11 a.m. About one hundred are now inoculated daily. The crowd of men, women and children in the waiting-room represented various nationalities, as

evidenced by their costumes, appearance and conversation. Many of them had their limbs bandaged and their arms in slings. Several Russions were there who had been bitten by mad wolves. M. Pasteur was to be seen walking around among the patients and conversing with them freely. He dresses very plainly, and wears a smoking cap; he is below medium height, and appears about 65 years of age; he is partially paralyzed on one side and walks with a limp. His demeanor is humble and unassuming, but in his countenance is seen intense earnestness, together with an anxious expression, and all his thoughts seem concentrated, and at all times, on the great problems in connection with *disease germs*, or *bacteria*, and at the present time more especially with those of diptheria and hydrophobia.

"Each patient has a number, and they are called into the operating room in rotation. The inoculation is made with a hypodermic needle in the side. The virus is prepared by mingling with broth a portion of the spinal cord of a rabbit which has died of hydrophobia, and from a half to one cubic centimetre is injected beneath the skin, according to the age of the patient. Each of the eight assistants has his separate duty in the various processes. The injections are made by Dr. Crancher. The operation in most of the cases did not seem to produce any pain, although some of the children cried lustily.

"Each patient is inoculated once daily for ten days. If they are too severely injured to come to the operating room they are placed in the hospital, and the inoculation given there.

"The next day we visited the laboratory on Rue d'Ulin. Shortly after entering the gate, near the porter's lodge, we met the eminent scientist coming from the Ecole Normale, where I received an introduction. On the way to the laboratory he made inquiries regarding the recent smallpox epidemic in Montreal, wondering at the great mortality. When informed that the deaths occurred almost altogether among those who had opposed or neglected vaccination, he was astounded that such opposition could exist, and exclaimed, *Est il possible? c'est terrible!'* Recognizing the fact that to oppose vaccination meant ignorance of the absolute protection afforded by it, he seemed indignant that the anti-vaccinationists should be allowed thus to influence the people, and suggested that they be more fully instructed as to its benefit.

"Coming to the laboratory we observed a notice at the door, stating that visitors to obtain admission must persent letters from the consuls of their respective countries. M. Pasteur brought us up to the portions of the laboratory where his assistants were working, and they gave us full explanation of the methods of preparing the material for inoculation. We saw there physicians from all parts of the world, studying Pasteur's methods.

"The virus of hydrophobia resides chiefly in the brain, spinal cord and nerves. And it was found by M. Pasteur that animals inoculated direct in the brain developed the disease in a shorter time than if inoculated beneath the skin. He found, also, that by successively inoculating monkeys. one from the other, that the power of the virus decreased, and if rabbits were used it increased in virulence, and the period of inoculation became in a corresponding degree shorter, until after a great number of transfers, extending over several years, it was reduced to seven days. It was ascertained, also, that by drying the virus it became gradually attenuated, or at least produced a milder affection (he believes the result to be due rather to a lessening of the amount of the active principle than to diminished virulence) so that, at will, inoculation material of different degrees of virulence could be prepared.

"Four rabbits are inoculated daily in the vascular surface of the brain. They are secured to a board and chloroform given, the top of the head is shaved and a slit made in the scalp, a circular portion of the cranium, about 1/3 inch in diameter is removed by a trephine, which is worked by a crank, with cogged wheels, it is so graduated that when pressed firmly down upon the skull it cuts through the bony part only leaving the membranes intact. The piece is lifted out with a tenaculum. The inoculating material is inected beneath the dura mater by means of a hypodermic syringe with a needle bent at right angles. The wound is then cleansed with a solution of carbolic acid applied with antiseptic blotting paper, and the scalp wound closed with sutures. They are then placed in cages, long rows of which may be seen on tables in the lowest flat of the laboratory. They invariably die on or about the tenth day, and in the cages one can observe at any one time the different stages of the disease as it affects rabbits. The wound heals in a couple of days and the rabbit appears well until from the 4th to the 6th day when paralysis gradually set, in.

They stop feeding and lie stretched out on their sides in the cage, becoming emaciated until paralysis is complete. A portion of the spinal cord of those dying on the tenth day is used to inoculate fresh rabbits, and other portions are hung in jars containing potash or other dessicating chemical material. After being in these jars for ten days, it becomes very much attenuated, and is used for the first inoculation of the patients; and each day a solution made from a piece of spinal cord mixed with broth and of increasing virulence is employed, that which remained in the drying jars for 9 days is used for the 2nd injection, that of 8 days for the 3rd and so on until the tenth day the strongest virus is used. Then the person or animal becomes insusceptible to the action of the most rapid virus."

M. Pasteur stated that he had not yet been able to discover the *germ* of hydrophobia, but believed he would yet succeed in isolating it. He spoke of the impracticability of his methods, seeing that the process was so complicated and required specialists to propagate the virus and to be in constant attendance. In order to maintain a uniform standard in the degree of virulence of the inoculation material, experiments on animals have to be made constantly. He though, that in the great centres of each country a laboratory maintained by the Government should be established, and funds be raised, either by subscription or by public grant, to send by rail or otherwise those who could not afford the expenses of travelling to these centres as soon as it is ascertained that they have been bitten by a rabid animal.

Before allowing any patients to be inoculated Pasteur makes full enquiries, through local physicians, and veterinary surgeons, as to whether they have really been bitten by a rabid animal or not, requiring the patient also to bring certificates from them. If the evidence is only partial that such has been its case he allows the patient the benefit of the doubt. The patients do not seem to suffer anything from the operations, appearing to be in perfect health.

The system will doubtless be improved upon after further investigation, but I have no doubt of its effectiveness even as at present practised. Rabbits or dogs receiving the ten inoculations are quite insusceptible to the infection from animals dying of genuine hydrophobia, and this test, is I was told, applied to one or two of the rabbits which are daily inoculated in the laboratory. Over a thousand cases have already been treated, and of these only seven succumbed to the disease, not including the Russians (8) who died from the bites of rabid wolves. France is recognizing the honour Pasteur has conferred by his great cleverness, by the efforts now being made to establish a permanent Institution on a larger scale. The Municipal Council of Paris has granted 2500 mitres of land on Rue Vacquelin as a site, and national, municipal and private subscriptions, as well as donations from foreign governments, are pouring in to be dovoted to the erection of this Institute. For the purpose of establishing a laboratory at any point, a rabbit is inoculated at M. Pasteur's laboratory. As animals will live ten days there is time to reach distant countries, when healthy rabbits are inoculated. The process must be repeated daily in order to propagate and have in constant readiness a continuous supply of the proper degree of virulence.

J. B. McC.

Progress of Science.

INGLUVIN.

A very learned name for a remedy is Ingluvin. It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals. The honor of its discovery and utilization, in its crude state, remotely dates with the Chinese gastronomer, as well as to the Caucasian chemist, in its refined condition. From time immemorial the inhabitants of the Celestial Empire have used the gizzard of chickens and ducks in nearly all made dishes. Their writers have recommended the practice as a sovereign treatment of dyspepsia, weak stomach and vomiting. A favorite prescription of Chinese physicians for chronic indigestion is to cut up and digest chicken gizzards in hot water until they are reduced to a pulp, and then add some spices. A tablespoonful or two of the resulting paste is taken at each meal until the patient has entirely recovered. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean people. Strange to say it was never learned by the great nations of Europe until the latter part of the present century. On the other hand, the organic chemists of Europe discovered, about 1850, a powerful nitrogenous radical in the gizzard. Experiments thereafter showed it to possess many of the qualities of pepsin. These experiments led to its isolation. Numberless experiments have proven it to be a very valuable addition to therapeutics. Where pepsin refuses to act, and where, in severe cases, it has even been rejected by the stomach, Ingluvin effected relief rapidly and with the greatest ease.

In four recent cases of poisoning by root beer (Brooklyn, June, 1886), Doctor George Everson, jr., a well known physician of that city, reports that after pepsin and all similar compounds had been rejected by the stomachs of his patients, Ingluvin stayed the retching and enabled them to retain and digest food.

Dr. Lassing reports a similiar experience in several cases of acute dyspepsia.

A priori, it would seem as if Ingluvin should be more efficient and potent than pepsin in many cases of physical disorder.

Our poultry are chiefly granivores, and have no beak nor other buccal apparatus for crushing the hard grain and seeds on which they so largely feed. The food is swallowed when apprehended, and passes directly into the crop or gizzard. This seems to act both mechanically and chemically. Its interior walls are covered by a dense, hard cultous membrane, surrounded by muscles of the most powerful type. Along with the food is always a small amount of sand and gravel. The organ acts apparently by bruising and cracking, rather, than is commonly believed, by trituration. The motion of the ingluvial muscles is accompanied by a slow but continuous exudation, from the walls of the crop, of a strong organic fluid, of which Ingluvin in the chief constituent. The hull of the grain or the shell of the seed is broken by the pressure of the walls and the gravel, and their interior is exposed to the chemical action of the Ingluvin. By the time it reaches the stomach it is ready for the gastric juices. From this point on, digestion proceeds as with the higher animals. As the gallinaceæ have very small salivary glands, and as the fluids secreted by these resemble the secretion of the parotid rather than that of the sublingual and submaxillary glands of the human being, it would seem as if Ingluvin played a double part, exercising the functions of the ptyalin of the saliva as well as the pepsin of the stomach. Ingluvin is prepared by the farseeing chemists, Wm. R. Warner & Co., of Philadelphia. It is made from selected gizzards, and is so carefully extracted as to be free from all foreign organic bodies. It is already known and appreciated by the medical profession. The AMERICAN ANALYST bespeaks for it the same appreciation by its readers. We extract the following:

Prof. Roberts Bartholow, M.A., M.D., LL. D., in his late work on "Materia Medica and Therapeutics," says:—INGLUVIN. This is a preparation from the gizzard of the domestic chicken—*ventriculus callosus gallinaceus*. Dose, gr. v.—ʒ j.

Ingluvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomachic tonic and relieves *indigestion*, *flatulence* and *dyspepsia*.

The author's experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administrated after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.—*From the American Analyst, August 1st*, 1886.

REMARKS ON INCONTINENCE OF URINE IN CHILDREN.

BY WILLIAM H. DAY, M.D.

Physician to the Samaritan Hospital for Diseases of Women and Children.

There is scarcely any disease occurring among children more annoying and troublesome than incontinence of urine. It is particularly vexatious to parents, and is often regarded by them as an incurable infirmity. After their patience has been long tried, they abandon one remedy after another, and look forward to puberty, when, they are told, the disease may depart never to return. Failure in treatment is frequently owing (1) to an erroneous diagnosis of the cause of the affection; (2) to the inefficiency with which the treatment is carried on; (3) to its being discontinued too soon; hence, in hospital practice, where patients can be watched, we meet with better results than in private practice.

Among the causes of enuresis, the following may be enumerated: If the urine be excessively acid, or loaded with urates, the bladder becomes overstimulated and readily discharges its contents. If the bowels be habitually costive, or there be worms in the intestines, vesical irritation may ensue; or, if the child be guilty of masturbation, there will be no chance of cure till the habit is corrected. Weakness of the muscular coat of the bladder from general debility or anemia is a very common cause; the bladder, not being able to tolerate any quantity of urine, readily excites the motor apparatus. I have known a troublesome case follow typhoid in a boy, ten years of age. If the disease be owing to a long prepuce, causing phimosis, it should be removed. Sometimes no cause can be ascertained. Children, two or three years of age, frequently wet the bed either from laziness or from lack of control over the bladder. It is important to remember that, even though the secretions are in perfect order, the incontinence may continue, and thus a habit may be formed which the poorer classes and stern people occasionally endeavor to correct by punishment. In some idle and dirty children such a course may be of benefit, but in others, who are nervous and timid, there is the possibility of increasing the evil we desire to remove. I make no allusion to those cases of enuresis associated with diseases of the bladder or brain.

Enuresis is sometimes seen in connection with chronic albuminuria, and is occasionally so persistent as to require special treatment. The following is a good illustration:

CASE I.—G. M., aged nine, was sent to me from the country, April 4, 1885. His bed was wet both

night and day. Before he was six years of age he had measles and whooping-cough; then, after a short interval, scarlet fever, followed by dropsy. A year after his recovery from the dropsy he could only pass his urine in drops. "He would stand up and cry, and say he wanted, and could not." He suffered in this way for two months, and then he would pass urine every ten minutes, but without pain. Some time before he left his home in the country he was tested for stone in the bladder, as he frequently had pain, and blood was occasionally present in the urine. The urine, on admission into the hospital, was highly albuminous (one-tenth part), of specific gravity 1020, pale, cloudy, and of acid reaction. A few casts were seen under the microscope. There was no fever, nor cardiac disturbance. He was confined to bed, and, as he had pain across the lumbar region, he lay during a part of the day on his abdomen, to lessen local congestion. He was ordered a milk diet, and a mixture of belladonna, nux vomica, and tincture of perchloride of iron three times a day. Four days after admission, he ceased to wet himself in the daytime, and on the 10th, 11th, and 12th he was dry at night. The bowels were kept open, and the albumen diminished. On the 30th, it was reported that he had not wetted the bed since the 14th. He passed a much less quantity of urine, but it was still albuminous. He went home, after staying in the hospital for six weeks, wonderfully relieved, his urine only containing a trace of albumen, and no blood-corpuscles. In November, I heard that the frequency in micturition had returned, that he was worse in cold weather, and that the urine was very albuminous. I have mentioned this case merely to show that the treatment, which mainly consisted in a milk-diet and attention to hygienic conditions, had for a time a very salutary effect.

CASE II.—E. F., aged seven, was admitted into the Samaritan Hospital under my care November 3, 1884. The patient was a twin, highly nervous and excitable, with mitral disease, probably congenital. She never had scarlet fever or rheumatic fever. She first began to ail fifteen months before admission, wanting to pass urine frequently. She wetted the bed every night; the urine was pale, copious, and contained phosphates, specific gravity 1020, acid. A solution of nitrate of silver was applied to the neck of the bladder (two scruples to one ounce), and for a few days it seemed to be of benefit. A mixture of tincture of belladonna and tincture of perchloride of iron was ordered hree times a day, but no good result followed, and on December 1st I began to employ Stohrer's smallest induction apparatus (interrupted current) with one closed cell, for ten minutes daily, one sponge being placed over the sacrum, and the other over the pubes. An improvement almost immediately set in, and the patient left the hospital cured on January 10, 1885. She was readmitted into hospital on September 30, 1885, suffering from general debility and pain over the cardiac region, but she had no return of the enuresis while she remained in the hospital for six weeks. This is the second case I have recently seen associated with heart-disease.

CASE III.—G. R., aged seven, was admitted into the Samaritan Hospital under my care November 27, 1884. For upwards of eighteen months he had wetted the bed at night, and frequently during the day. The mother fancied that he had been tampered with by some boys of his own age. The urine was very pale, of acid reaction, and contained a few phosphates. He was ordered a milk-diet, and meat, once a day. Faradization was used daily for ten minutes. He took a mixture of tincture of belladonna and tincture of perchloride of iron three times a day, and left the hospital cured on January 9th, having wetted his bed only five times since his admission, and some of these nights very slightly.

CASE IV.—A. H., aged eight, a pale and irritable boy, was born in South America, a healthy baby. He had incontinence of urine from birth. When brought to me on December 13, 1884, he wetted himself both night and day, and was invariably wet after being in bed ten minutes. He passed large quantities of high-colored offensive urine, containing much uric acid. When the urine had become normal, he was ordered tincture of belladonna, and tincture of perchloride of iron, in five-minim doses three times a day. On January 12th, the appetite had improved, but the enuresis was the same. Stohrer's apparatus was now used for ten minutes daily, the sponges being placed over the sacrum and pubes. The iron and belladonna mixture was continued. On the 18th of February the report states that he had passed several nights without wetting his bed; but, as the urine contained phosphates, and the boy seemed very weak, he was ordered ten minims of dilute phosphoric acid, with two minims of liquor strychnia, three times a day. On March the 9th, the urine being normal, fifteen minims of the tincture of belladonna were given twice a day. The use of the battery was discontinued. From the 17th to the 21st, he was not wet at night, but was wet on the nights of the 22nd, 23rd, 25th, 26th, 27th, 30th, and 31st. From April 1st to the 12th, the bed was dry at night; on the 13th it was slightly wet, and, therefore, the tincture of belladonna was increased to forty-five minims daily. He invariably awoke to pass urine, whereas formerly he wetted the bed without knowing it. On April 19th, he went to Brighton, and stayed a month there. He had a sea-bath morning and evening, and was out the greater part of the day. For seventeen consecutive nights he did not wet the bed. During this time he took two drachms of the belladonna mixture twice a day, being equal to one drachm of the tincture daily. The use of battery was discontinued. It was noticed that his pupils became very large, and when he attempted to read he saw a mist before his eyes. On September 1st, it was reported that he had perfect control over his bladder in the day time, and had not wet

the bed oftener than once a week, and then but slightly. He has had no return up to the present date, January 25, 1886.

CASE V.—A young lady, aged nine, was brought to me by her mother in September, 1885, suffering from enuresis of nearly a year's duration. All treatment had failed to relieve her. The use of the battery was ordered every night for ten minutes, and a mixture of belladonna and iron three times a day. These measures were continued for six weeks when the patient was well, and she so remained for three weeks afterwards, when the symptoms returned slightly," but not nearly in the same degree." The battery got out of order, and, the patient living in a remote Irish district, there was a difficulty in getting it repaired. If the use of the battery be resumed regularly, the cure will be complete.

REMARKS.—It seems impossible to lay down a plan of treatment for general adoption; the peculiarities of constitution and habits of life must be taken into consideration, and haphazard treatment guarded against. The cases recorded were cured or relieved by the combined influence of electricity, iron, belladonna. Cases two and three are good examples of the utility of faradization. Case four is a very important one; the symptoms dated from birth, and resisted various methods of treatment. The successful issue is in great measure attributable to the constant care which the mother took in feeding the child, and rigorously attending to my instructions. Those cases that date from birth or have lasted upwards of a year, are invariably intractable, and often incurable, especially if the child be of nervous parentage or delicate when born, or pass large quantities of urine. With respect to the utility of faradism there can be no question; it requires to be used regularly, and to be continued for a considerable time; but it sometimes fails altogether. When the nervous system is weak, and there is generally debility the sphincter loses its power, and urine escapes by night and day without the child's knowledge. It is in such cases as these that iron and nux vomica are of service.

If there be excess of muscular action, and the child have frequent inclination, and without power of control, belladonna is an admirable remedy. It occupies a prominent place as a therapeutic agent, and sometimes, when combined with iron even in small doses, it seems to do good; but it should not be given up in obstinate cases till either soreness of throat is produced or dilatation of the pupils takes place. In my hands it has often failed when administered in any form or dose. It certainly tends to lessen irritability of the bladder, and should always have a fair trial.

Cold sponging in the morning is very serviceable in cases of enuresis that appear to have their origin in general debility. It braces up the nervous system, and is a powerful tonic. The slight sensation of chilliness soon passes away, without leaving any depression, if vigorous friction with a towel be employed for a few minutes. In a case under my care about three years ago, the cure was attributed to this simple measure when one remedy after another had failed. The vital functions are brought into a healthier state, the skin acts better, and the appetite and digestion improve. However delicate a child may be, free sponging in tepid water, followed by a good rubbing, is of great value. The water may be used at a temperature of 90° at first, and as the child becomes stronger, may be lowered to 70°.

Now, a word as to diet. Milk is an important non-irritating article of food, and should be mainly relied upon in these cases; but the quantity given at one time should be restricted, especially on going to bed. Farinaceous puddings, containing eggs, are admissible. When the urine is turbid and acid, or the child is rheumatic, milk ought to take the place of nitrogenous food. A child under my care at the present time, with a " large white kidney," is troubled with frequency of micturition when allowed a little beef-tea, while when adhering to the milk she only passes urine twice, or at most three times in the twenty-four hours. In states marked by anemia and general debility, however, animal food is an essential article of diet. —*The British Medical Journal.*

CHRONIC CYSTITIS.

A paper read before the Academy of Medicine, March 29, 1886.

By P. S. CONNER, M.D.,

Professor of Anatomy and Clinical Surgery, Medical College of Ohio.

In a state of health the bladder admirably performs its physiological function, that of holding the gradually formed urine until such time as micturition may be convenient and proper. Neither in the viscus itself, its contained fluid, or the canal through which it is discharged, is there a source of irritation. But let there be a long continued altered state of the inflowing fluid, a tumor of the bladder wall, a retained foreign body in the cavity, or an obstacle to the ready outflow of the urine through the urethra, and, sooner or later, in greater or less degree, there will be developed a state of chronic inflammation with associated changes in the chemical constitution of the fluid. In any case, therefore, the diagnosis being established, before any method of treatment is instituted determination must, if possible, be made of the exciting cause; the removal of which, if ascertained and capable of being taken away, should be effected at the earliest moment. If the primary trouble is in the kidney therapeutic or operative measures must be adopted accordingly. If there is a foreign body in the bladder it must be extracted. If there is an urethral stricture it must be dilated, divulsed or divided. Such stricture makes trouble in two ways, by causing alterations in the urine, dammed back in the bladder, never completely evacuated, and as a result decomposing and becoming an active irri-

tant to the mucous membrane; and further by affecting the circulations in a bladder wall compelled to abnormal action because of the undue resistance that it has to overcome in forcing the stream through a more or less contracted, unyielding and inelastic tube. Because of the ready removal of the condition which produces the cystitis associated with stone or stricture, such cases of chronic inflammation of the bladder, if they have not existed so long as to have become complicated with lesions of the kidney, can be cured with comparative ease.

It stands to reason that if the inflammation is excited, maintained or aggravated by the irritant character of the urine, just in proportion as such is lessened will the morbid state be diminished; and this can be effected in no slight degree by increasing the amount of urine passing through the bladder. To such flushing of the cavity, distributing and carrying away the sedimentary mucus and pus, is due the favorable effects of the administration of large quantities of water, either any ordinary soft water or that obtained in a state of great purity from certain springs.

Some of the infusions owe a part at least of their reputations to the good effect of the cleansing of the bladder by the increased amount of urine passing through. For like reasons, washing out the bladder by injection acts beneficially, provided it is properly done, and with a suitable fluid. The instruments must be clean, in the fullest surgical sense of the word, the fluid warm and such as to arrest and prevent decomposition. Theoretically the weak sublimate solution is the best that can be employed, but practically it is found not infrequently to be badly borne, even when of strength of not more than one part in 6, 7 or 8,000. As good a solution as can be used is, in many cases, that of boracic acid of strength of 3 ss— 3 j to the pint of water. Care must always be taken not to throw in the fluid too rapidly or too strongly, and if a single current catheter is used not to over-distend the bladder.

In elderly men an existing cystitis, if neither stone nor stricture is present, almost always depends upon enlargement of the prostate, in a small proportion of cases confined to the third lobe. Such enlargement acts as a stricture does, producing the same condition of the urine and of the bladder wall. In the earlier stages and the milder degrees the indications for treatment are very clear. Systematically, at regular intervals, the bladder must be completely emptied, and that with the least possible effort to the patient—in other words, catheterization should be made and natural evacuation altogether suspended; suspended, not abandoned, for not infrequently after steady use of the catheter for many months or years patients may without resulting ill effects permanently lay aside the instrument. As a rule though, the subject of prostatic hypertrophy in amount sufficient to produce notable effects upon the bladder and the urine should make up his mind to uniformly employ the catheter during the rest of his lifetime; the soft instrument preferably, and always properly disinfected. In very many cases the chemical changes in the urine are due to bacteria, carried in on the catheter; and it is because of the germs thus introduced that the frequent use of the instrument has long been recognized as likely to be, if not certain to be, followed by putrefactive changes in the urine and an aggravation of the symptoms.

In the older and severer cases, when the general hypertrophy of the prostate is marked, the basfond of the bladder consequently deep, the residual urine in decided amount and alkaline in reaction, catheterization and antiseptic irrigation are the essentials of treatment; attention to which, together with due regulation of the general habits of life, will ordinarily keep the patient in a state of comparative comfort. Even when the muscular coat has been so enfeebled as to permit of over-distension and of long retention with its usually associated and resulting incontinence, the same method of treatment steadily maintained for months will, if there has not been too much damage done the kidney, produce marked improvement in the local and general state. But oftentimes the bladder, instead of being over tolerant, is excessively intolerant of fluid, the presence of a very moderate quantity of which is sufficient to excite a spasmodic painful, imperious desire to urinate. This condition may be associated with and dependent upon prostatic hypertrophy, very apt to be of the ball valve variety or complicated, as it often is, with urethral stricture, upon bladder tumor, or upon tubercular disease of the prostate or the seminal vesicles.

The intensity of the irritability of the bladder is many times markedly affected by the habits and mental state of the individual. In these cases the plan of treatment already indicated may be sufficient to so greatly lessen the severity of the symptoms as to render the patient unwilling to have anything else done. When there is decided difficulty in the introduction of the catheter, either because of the size and direction of the canal, or because of an over-sensitiveness of its lining membrane, permanent retention of the instrument has been advised. In my judgment such advice is not good, for even if a soft catheter is employed, (and it certainly is to be preferred) it will soon become encrusted, it will be almost certain to increase the irritation, and it will be very difficult if not impossible, to keep it aseptic. In many cases, indeed in the very ones in which a sonde a demeure would seem to be most indicated, no soft instrument can be introduced.

It is in these cases of severe character, and often of irritable nature, that operative interference is so strongly called for, and is capable of accomplishing so much. Open out the contracted urethra by sound or knife, and the pre-existing bladder inflammation will generally rapidly diminish, perhaps altogether disappear.

If there is prostatic enlargement what can be

done? Only a few years ago, comparatively, it was hoped that in parenchymatous injections of the enlarged gland we should find a means of producing shrinkage, but extended experience has proved its utter valuelessness. Prostatotomy and prostatectomy, either internal or external, have much to commend them. I am becoming more and more convinced that in all the severer forms of chronic cystitis in the male, either perineal section or suprapubic cystotomy should be made. By a comparatively slight operation, the opening of the membranous urethra, we may readily get at the prostate, recognize the position of, and so be able to remove by knife, punch or snare, a bar or ball obstructing the neck, and in the majority of instances be able with the finger to sweep a part or the whole of the mucous wall of the bladder, thus locating any tumor that may be present. Through such perineal opening any existing prostatic or vesical calculi may be removed. Further, and more importantly, thorough and complete drainage of the bladder may be secured, a full-sized tube being easily introduced, comfortably well borne, and readily removed; no such objections resting against its protracted use as we have seen lie against a permanently-retained catheter passed through the unopened urethra.

Experience has shown that the pressure of a drainage tube thus employed causes a dilatation of the neck and prostatic portion of the canal that may be expected to be permanent, and which will permit, after some weeks or months, of the removal of the tube and the allowing of healing of the wound. By drawing off the urine as fast as it comes into the bladder there is secured to that organ the rest which above all things else is the essential element in the treatment of any surgical affection. If the cystitis depends (as it probably does much oftener than is commonly supposed) upon a vesical tumor, the perineal operation permits of the determination of the location, size and nature of the neoplasm; of its removal, if practicable; and, under all circumstances, of the cleansing and draining of the cavity.

In those distressing cases, met with usually in young subjects, of cystitis dependent upon local tuberculous deposits, where the symptoms of stone are so strongly simulated, perineal section with dilatation of the prostatic urethra or division of the gland, gives more relief, and that more speedily, than anything else that can be done. Guyon and his followers of the French school urge that the opening into the bladder should be supra-pubic; and there are unquestionably advantages in such operation over the perineal one, with, however, associated disadvantages, so that extended experience alone will suffice to clearly indicate which should be regarded as preferable in the ordinary run of cases. In any and all forms and grades of chronic cystitis the prime indications of treatment are to remove the cause and give the organ rest; and just in proportion as these indications can be fulfilled will relief be afforded and a cure effected.—*Cincinnati Clinic.*

BLEEDING FROM THE NOSE OR EPISTAXIS.

This hæmorrhage may arise from two conditions of constitution. (1). It may arise in the young, plethoric, full-blooded subject, caused by vascular excitement owing to determination of blood to the head. It may also be vicarious, as when the menses are irregular in young full-blooded females (epistaxis helps to relieve the vascular tension), and also it may occur in woman at the change of life. (2). It may also be passive, arising from a low, debilitated condition of the constitution; and as a rule this form comes on in older subjects from a pasive draining of venous blood owing to some obstruction of the circulation such as disease of the heart or liver would induce, or to a morbidly thin state of the blood with general relaxation of the blood vessels, which is found in scurvy, purpura, and in the last stages of fever. Druitt mentions that from 15 to 25 is the commonest age for *active* epistaxis and from 45 to 55 for the *passive* form.

Treatment.—In cases of bleeding from the nose in young plethoric subjects, such hæmorrhage seems to do them a great deal of good, and gives great relief if they suffer from congestive headaches in hot weather, and this epistaxis may be looked on as very salutary, being merely nature's method to relieve the vascular tension of the blood. However, if it does not soon stop of its own accord, steps must be taken to stop it by therapeutic means. Some simple plans have been recommended:—(1) The hands to be held perpendicularly over the head. (2) A cold key to be placed under the clothes on the spine so as to act by reflex action. (3) Cold to be applied to the forehead and the patient to lie motionless on his back, for when the nose bleeds the patient generally leans over a basin with the head down. This position obviously favors its continuance. 4. Ether spray to be pumped on the outside of the nose at each side. A piece of ice applied to the back of the neck or the roof of the mouth will generally stop it. 5 Snuffing up the nostrils powdered alum, tannic acid or gallic acid or powdered nutmeg or cobweb so as to entangle the fibrin. A small plug of cotton wool may be introduced and left in the bleeding nostril, and the patient, cautioned not to blow the nose, as this will only disturb the natural clot, if forming. Wetting the cotton wool or strips of lint with strong alum water or dilute tincture of the perchloride of iron or dipping it in powder of tannin or matico, then introducing it up the nostril, will at times prove effective. (6) A wooden paper clip fastened across the bridge of the nose so as to compress the alæ together has also been pressed into service in such cases with a satisfactory effect. Pressure on the facial artery as it passes over the lower jaw has also been recommended. (7) Washing out the nostril with a continual flow of very cold or iced water. When the patient is directed to breathe through the mouth the soft palate is so raised up behind as to effectively close the posterior nares, and the water injected into one

nostril passes through the other nostril and escapes at the opposite anterior nares. This will frequently stop epistaxis. When everything has failed, and the bleeding still continues, plugging the posterior nares must be carried out. Some surgeons state that it is hardly ever necessary to plug the posterior nares, for they say if long, narrow strips of lint saturated in some styptic fluid are passed through the anterior nares, and by gentle manipulation by means of a probe or director, the nostril can be effectively packed as if the posterior nares were plugged. The plan is certainly much easier, and not at all so unpleasant to the patient, and well deserves a trial. Plugging the posterior nares can be either done by means of a catheter or by Belocq's canula. A plug of lint must be made about the size of the first joint of the surgeon's thumb; to the centre of this must be attached three long strings. If the catheter is used, a hole must be made in the end of it, through which is passed a loop of twine and tied; the catheter is then oiled and heated and gently introduced through the anterior nares of the bleeding nostril, and when it arrives at the posterior nares it must be gently urged onwards; the patient is then requested to open the mouth widely, and the end of the catheter with the twine attached will in all probability be seen beyond the soft palate; the loop of twine is to be seized with the forceps, to which are attached the *two* strings of the plug. The catheter is now withdrawn, carrying with it the two strings attached to the plug through the bleeding nostril. These strings must now be pulled tightly, and the plug with the other string attached is quickly carried through the mouth and guided with the index finger of the left hand until it is firmly wedged in the posterior nares. If bleeding goes on, strips of lint may be inserted in the nostril between the two strings, and by their means permanently retained there. The third string through the mouth may be fastened on the side of the cheek with a strip of plaster. The plug need not be kept in this position longer than thirty-six or forty-eight hours, by which time it generally gets very fœtid, and can be easily dislodged by pulling gently on the string that passes through the mouth. If Belocq's spring canula is used, precisely the same steps are taken as regards passing the canula and fixing the ends of the twine on the end of the spring canula, and drawing it back through the nares. So much for the local treatment of epistaxis. But it must be in some instances treated by constitutional means as well, and, in fact, no surgeon in serious epistaxis should be satisfied to depend on the local treatment alone. Hazeline, an American fluid preparation, has been strongly recommended—ten drops in half a wineglass full of water to be taken three times a day. Ergotine, ten drops to be injected under the skin, has also been found most useful. Mixtures containing gallic and tannic acids with ergot, aromatic sulphuric acid, and acid infusion of roses are also recommended where the blood is thin and deficient in fibrin. Preparations of iron, such as the muriated tincture, are indicated in low, debilitated subjects; the system should be toned up by nourishing albuminous diet, as the longer the debility lasts the more frequent will the attacks of epistaxis appear.

Bleeding from the Mouth, the result of Disease.—This form of hæmorrhage—unless when arising from ulceration—is in most cases from the gums, as in scurvy. The quantity at one time is never very large, but, if continuous, treatment must be adopted to stop it.

Treatment.—Mouth washes must be ordered containing astringent substances, viz., borax, tannic, and gallic acid, tincture of colchicum wine, myrrh. Alum made up with glycerine and rose water makes an excellent wash for such cases. The constitutional treatment, however, must not be lost sight of.

SHOULD POULTICES EVER BE USED AFTER AN ABSCESS OR WHITLOW HAS BEEN OPENED, OR TO AID THE SEPARATION OF SLOUGHS?

By CHAS. B. NANCREDE, M.D.,

Professor of General and Orthopædic Surgery in the Philadelphia Polyclinic, Surgeon to the Episcopal Hospital, Senior Surgeon to St. Christopher's Hospital.

Our reply to the above question is a most emphatic negative. Before an abscess or whitlow has reached the stage when either the patient consents to incision, or the surgeon is willing to lay it open, undoubtedly poultices serve a useful purpose. We are willing to go further, and admit that in the case of a felon, where sloughs have to be separated, or in a wound where the same process has to be gone through with, poultices will *hasten* the separation of dead tissue, but—and this is a most important "but"—*will the whole duration of the case be lessened, and will the minimum of danger result?* Most assuredly not. We cannot help thinking, for scientific reasons, that the vulgar belief has some truth in it, that prolonged poulticing causes death of the bone in some cases of whitlow. Let any unprejudiced surgeon compare the appearances presented by a poulticed felon, and one treated after the method I advocate, and I feel convinced that half my position will be readily conceded.

A few words as to the anatomy of the distal segments of the fingers will render more clear the truth of my pathological deduction. The distal phalanges have, in reality, *no* distinct *periosteum* as such, the whole fibro-fatty tissue of the finger pulp serving the purpose of a scaffolding for the support of the nutrient blood-vessels. Hence inflammation of this tissue so often ends in death of the bone, for it too commonly results in more or less sloughing of the pulp, *i.e.*, the periosteum dies and the bone with it.

It is not my present purpose to dwell upon the proper treatment of whitlow, only upon the best dressing after an incision has been made into one; but I would beg my readers to impress upon their minds the above anatomical fact, which will induce them, I believe, to freely incise a commencing whitlow *whether pus has already formed or not*, merely to save the vitality of a tissue upon which depends the life of the bone.

What, now, must be the effect of a poultice on such an inflamed tissue? The only chance of its regaining vitality sufficient to preserve the life of the phalanx is to have diminished the amount of congestion and the quantity of the inflammatory exudates, which are strangulating the blood supply. Again, we will not stop to argue whether the stable connective-tissue cells of the part proliferate, or whether only migrated white blood cells, or both, form the exudate, since the *mechanical* effect is the same. Heat and moisture in such a pathological condition tend to still more relax and therefore render, on hydrostatic principles, more sluggish the blood current, and nature is compelled, in the attempt to relieve this, to favor the egress of white blood-cells in larger and larger quantities. If the chief outflow of these takes place directly from the incision, well and good, but how if the migrating cells crowd into the already over-filled intersects of the pulp; can anything but further strangulation of the tissue and harm accrue? We have heretofore entirely ignored the rôle that micro-organisms play in suppuration and sloughing, but it cannot fail to be seen that, if modern views are correct, the heat and moisture of the nasty, dirty relic of barbarism, called a poultice, must present the most favorable condition for their development.

A glance at the condition of the circulation in the surrounding undoubtedly healthy parts will convince any unprejudiced person that at least I have some grounds for my crusade against poultices.

To a less degree, so far as strangulation of tissue goes, my remarks apply to a confused and sloughing wound. My opponents will say what have you better to offer us, to replace this easy, time-honored method of dressing? Simply some form of antiseptic dressing. It would be certainly difficult for me to recall when I have willingly employed a poultice for a suppurating cavity.

My preference for a whitlow is free incision soaking in a mercuric bichloride solution, dusting freely with iodoform and dressing with absorbent cotton impregnated with the same drug. This usually need only be removed on the third day after, unless pain and tension be complained of. For an abscess, free incision, with counter-incision, if necessary, at the most dependant portion, the introduction through both orifices of a *large* drainage tube, the thorough and repeated syringing out of the cavity with mercuric bichloride solution, and the same iodoform and cotton. For a contused and therefore a future sloughing wound, antiseptic irrigation should be used, with appropriate incision, if there seems to be much risk of inflammatory swelling; if not, merely iodoform and cotton.

To what cases can this method be applied? To all such as warrant conservative treatment. Within the last seven weeks I have treated eight severe confused and lacerated wounds of the upper and lower extremities, with perfect success, except in one instance, where spreading gangrene set in and necessitated a successful thigh amputation. Two of these cases were severe compound fractures, produced, one by a cart the other by a railroad train, while five were *very* severe "bumper crushes," *i.e.*, received by the limb being caught between the bumpers of cars, either while being coupled or when the motion of the train was checked. The damage done by such accidents rarely admits of conservative treatment, and I certainly have not met, in as many years, with so large a number of fortunate cases, affording such admirable results. As my experience goes back to the simple cerate, poultice and bran-dressing period, I am competent to judge of the very different results attained by antiseptic methods. But can these effects be achieved only by the dressing suggested? By no manner of means. Only let Listeria *principles* be put in force; and Lister's own own dressing, or a dozen modifications of it may be adopted. My personal preference is for the dressing suggested, on account of its simplicity, cheapness and efficacy.

Those who follow my advice will at first be disappointed by the primary tardiness of the cure. The sloughs separate only very slowly. But what matters it, if there be next to no pain, fever, or suppuration. So long as the wound is aseptic your patient is safe, and when the slough does separate, instead of macerated, soggy œdematous tissues, slow to take on healthy action, you will have a healthy wound which rapidly cicatrizes. Your patient will not be emaciated, have been unable to eat, with a coated tongue, and a disordered gastro-intestinal tract—quite the reverse.

Finally, do not continue the iodoform too long, as, after a certain point, it inhibits the healing process; and when you see the granulations becoming either over-florid, or pale œdematous, resort to the use of powdered boric acid. When the sore becomes a superficial one I commonly use zinc or resin cerates, having first washed the sore with the bichloride, or some other antiseptic solution, and powdered it freely over with boric acid.

Of course, after bad crushes suppuration will at times occur in the damaged intermuscular planes without any direct communication with the wound. This will cause a sharp rise of temperature, pulse, etc., but being aseptic, as soon as the pus is evacuated all these symptoms will subside in the course of twenty four hours, or less.

NURSING.

FOMENTATIONS.—Fomentations have almost the same action as poultices. They are often used alternately with poultices. They have the advantag

of being lighter, and therefore are better borne on tender surfaces. They are made by pouring boiling water over flannel, and then ringing the flannel out, shaking it up and applying it. They are to be covered with oiled silk, and fastened on with bandages. If wrung as dry as possible, there is very little danger of scalding or blistering, no matter how hot the flannel is.

The wringing can be done in an ordinary towel, but it is easier to do it by means of a roller towel. The flannel is placed in the centre of the roller towel in a basin, and boiling water is poured over it. Sticks are passed through each end of the towel, the centre is raised, the sticks twisted in opposite directions, and so the flannel is wrung out.

An ordinary towel will also do. It is spread over a basin, the flannel is placed upon it, and boiling water is poured in. The towel is then folded over the flannel, it is lifted out of the basin, and the two ends are twisted in opposite directions until the flannel is squeezed dry.

The flannel is shaken up in order to let the air into its substance and folds. Air being a bad conductor of heat, this causes the fomentation to retain its heat much longer than it would otherwise have done.

If poppy heads have been boiled in the water it will be more anodyne.

Spongio-piline, being porous at one side and water-proof at the other, does excellently for fomentations.

Twenty or thirty drops of turpentine, sprinkled on either the flannel or spongio-piline, is a good counter-irritant. It is often used when the abdomen is distended with air.

As fomentations rapidly become cool they must be frequently changed. When they are finally removed, the skin must be dried and covered with flannel, to prevent catching cold.

Dry heat is applied when warmth is necessary, and it is desired to avoid the relaxation of the tissues caused by moisture. Flannel, heated before the fire or in an oven, is used; also sand or bran, sewn in flannel bags and heated in an oven. Camomile flowers can also be used, and are lighter than sand. A flat tile, heated and wrapped in flannel, retains the heat for a long time.

One of the commonest ways of using dry heat is to apply tins, jars, or bottles of hot water to the feet. They ought to be wrapped in flannel, to prevent the skin being injured. Too great heat ought not to be applied to the unconscious or paralyzed.

BLISTERS.—Cantharides, or Spanish fly, is the general basis of blistering preparations. (The name Spanish fly, is misleading, the insect in question being really a beetle, and a native of Hungary.) When applied to the skin, it causes tingling, smarting and a sensation of heat; soon the true skin becomes congested, and an oozing takes place. The minute drops of serum enlarge and coalesce, forming different sized blebs. The outer skin or epidermis, is, of course, raised up by the fluid.

As a rule, blisters are employed as counter-irritants, and for this purpose redness and a minimum amount of vesication should never be employed, unless for some special object, as the contents of the vesicles is very similar in composition to blood, and it is found in practice to be as weakening as though the same amount of blood had been withdrawn.

The effect of counter-irritation may be shortly explained. It effects the nerve-endings, and through them causes an impression to be brought by the nerve-fibres to some portion of the brain. This causes another impression to be carried by other nerve-fibres, either to the spot where the counter-irritant was applied, or to some other portion of the body which receives nerves from that part of the brain.

Thus we find that the irritating the skin may have an effect on the brain. This is seen in some cases of coma, where consciousness is aroused by blisters applied to different parts of the body in rapid succession, and for a short time each, "flying blisters."

We also find that it may have an effect on some other part of the body. Thus a blister in one situation may ease pain in another. And, fortunately, we have a simple rule which helps to show where to make these applications. The nerve that supplies a joint or muscle also supplies the skin over it, so a superficial application generally affects the tissues beneath.

The common preparation of cantharides is a thick plaster. A piece the required size may be cut off a sheet, or some may be spread on sticking plaster, a margin of the latter being left to fasten the blister to the skin.

Blistering fluid is convenient, clean, and efficient. It is painted on with a camel's-hair pencil. The amount put on and the delicacy of the skin will regulate the effect.

A small blister can be readily made by putting some cotton wool into a silver thimble and pouring on it a few drops of strong solution of ammonia. The thimble is then inverted on the skin, and kept there for ten minutes. By this time a blister will have risen. Counter-irritant by mustard, iodide, or croton-oil liniment may often take the place of blistering.

The dressing of a blister deserves careful attention, as careless or ignorant handling may cause severe suffering. Unless specially directed to the contrary, a blister should not be opened, but be covered with a layer of soft cotton wool until the effused serum is absorbed. Even if the blebs are too large to admit of absorption, it is important to preserve the covering until the true skin has had time to form a new epidermis. The nerve endings (a touch to which causes such exquisite pain) are thus protected and the risk of ulceration is lessened.

THE DIETARY IN ACUTE DISEASES.

By J. MILNER FOTHERGILL, M.D.

Ed. Hon. M. D. Rush, Physician to the City of London Hospital for diseases of the chest.

Strange as it may seem, the present method of feeding persons acutely ill is nearly as irrational as if Majendie had never existed, and physiology remained an unborn science. Fashion has ruled the roost. Veal broth had given way to calves'-foot jelly when my acquaintance with sick persons commenced. The French committee had pronounced against gelatine as a food, but that did not weigh much with the public. If a sick man died without having been duly supplied with gelatine in the form of this jelly, loud and deep were the indignant comments of his neighbors. Then came a distinct improvement in the form of milk and seltzer water introduced from Germany. This being fluid-food, slaked the thirst, and soothed the dry fauces in pyrexia. It sat lightly on the stomach, and was agreeable to the palate. But after all the actual nutriment supplied by it was (practically) confined to the milk sugar. Clinical observations have been borne out by experiments to the effect that the digestive ferments are greatly impaired in illness. As to the absorption of fat in febrile states much doubt rests upon the subject. Being already in a fine emulsion some of the fat globules may find their way into the mouths of the lacteals of the intestinal villi, and so may afford some nutriment to the system. But of the digestion of the caseine it is even more doubtful if any go on.

Firm curdling is common, and this firm curd appears in the stools as hard white lumps. Consequently at the London Fever Hospital a strict watch is kept over the stools, and when pieces of white curd are detected means are taken to obviate this firm curdling. The two plans that suggest themselves are: (1), some mechanical agent like biscuit powder which will lessen the cohesion of the curdled mass; and (2), some stronger alkali than seltzer water, Vichy or Vals, or other water well charged with alkalies may be added to the milk in equal quantities; or another plan is to stir in some light carbonate of magnesia or prepared chalk. By such means the acidity is neutralised and a curd formed which is disintegrated by the liberation of the carbonic acid. Sir William Roberts, M. D., pointed out in his address before the British Medical Association at Cardiff, in July last, that the gas of champagne lightens up the mass of food in the stomach and so aids digestion. This disintegration of the milk curd is most desirable in any morbid condition.

But in pyrexial states it is very doubtful if the digestion of albuminoids is desirable even if practically attainable. During pyrexial states there is acute and active hystolysis. That is well known. Its nitrogenized tissues melt down under a sustained high temperature by a process of acute fatty degeneration. When convalescence sets in then tissue repair is active; and the keen appetite and capable digestion provide liberal supplies of albuminoid matter for the swift histogenesis then taking place. But while the hystolytic process is afoot tissue repair is impossible. In his opening address to the medical society of London (session 1885-86, Dr. Ord, the president, made reference to some experiments he had performed which went to show that the arrest of the normal histogenetic processes in pyrexial states is one factor in the increased heat production. To attempt, then to supply the albuminoids to the body in conditions of high temperature is to achieve no good end, and only to increase the risks and dangers which belong to a state of blood highly charged with excrementitious matter of nitrogenised character—in other words, the typhoid condition or urœmia.

Where there is little or no pyrexia present then the caseine of milk may be both digested and be useful. Beef tea containing some of the meat fibrine, too, is useful. Part, if not all, of the meat fibre ought to be beaten to a paste or a pulp and then returned to the infusion; by which means a distinct food-value is given to the beef tea. In acute gastric disturbance, in conditions of debility, as after hemorrhage, such forms of albumenoids are excellent; and supply the tissue needs until more solid food can be taken.

But in acute pyrexial states only fluid foods can be taken. The thirst causes a demand for fluids on the one hand, while fluid forms of food are best tolerated by the stomach. What should these fluid foods consist of? In the first place comes milk (with its soluble milk-sugar), which may be given with seltzer or other water, or as whey, or with water; in the latter case it is well to add some soluble carbo-hydrate, as any food consisting of predigested starch. Also a malt extract prepared as follows: reduce to consistency by the addition of a little water, until the fluidity is such that it will readily mix with some aerated water. This forms a most excellent food containing soluble carbo-hydrates of the most digestible character

Cereal matter which has been well-baked or malted is *par excellence* the food for pyrexial states. A certain conversion of the insoluble starch into soluble matters as dextrine (and maltose in malted preparations) has thus been brought about. Baked and malted preparations are now on the market in any quantity. Where prepared food contains malt it possesses diastase which can further carry on the starch conversion into or towards maltose in the presence of warmth and moisture. Such predigested and self-digestible food of farinaceous character can be used in various ways. It can be added to milk and increases its nutritive value. It is invaluable as an addition to beef tea, chicken broth and mutton broth, giving the beverage a distinct food value. It can be added to any soup which is best prepared from fish. It can be used with home-made lemonade, or apple water, lending to them a nutritive value.

Further such soluble carbo-hydrates (prepared according to the directions supplied with each "Food") form a fluid vehicle in which wine or spirits can be given pleasantly, when some stimulant is indicated.

Preparations of predigested starch are of unspeakable value in acute pyrexial states when the natural digestive powers are greatly impaired.—*Journal of Reconstructives.*

THE TREATMENT OF CHRONIC HEART DISEASE.

The observations of Dr. Schott, of Nauheim (*Berliner Klin. Wochensch.*, 1885, Nos. 33-36), since 1871, extend over 300 cases, and the clinical histories of a fair proportion of these are followed up. It will be remembered that Stokes was the first to advocate a life of active excercise in chronic heart disease. Indeed Stokes went so far as to say that, for a man with well-compensated valvular lesion, the greatest misfortune that could happen to him was to have his cardiac trouble discovered by a medical man. This was because a number of restrictions were, as a rule, imposed upon his usual mode of life, all tending to a debilitating illness. The consequences was that the heart-muscle, like the other muscles of body, lost strength, and dilatation of the heart supervened earlier than would otherwise have been the case. Stokes's doctrine of the positive value to the heart of a life of activity has received more attention on the Continent than amongst his own countrymen. In Germany, especially, it has been developed into a complete system of treatment, on various lines. Oertel, as is well known, prefers hill-climbing to any other method, care being taken to ward off any threatening dyspnœa by repeated stoppages, and by making a few deep voluntary respirations before proceeding. This mode of exertion is selected partly also from a desire to unload the venous system, and the right side of the heart in particular, by diminishing the volume of the blood generally; and the excessive perspiration induced by mountain expeditions does this gradually and effectually, the supply of liquid being duly restricted by removal of the excess of water from the blood.

Dr. Schott makes great use of stimulating baths, together with the systematic exercise of the various muscles of the body at home by the aid of an assistant; but the bath is made apparently the chief element of the treatment. An artificial Nauheim bath (apart from carbonic acid) may be rudely imitated by adding to softish water 1 to 1½ per cent. of common salt, and as much per mille of chloride of calcium, the temperature being 93° F. Very weak patients have the water a little warmer, but not beyond 96° F.; and in all cases the bath should be a short one, a second chill being avoided. The baths are gradually made stronger, cooler, and the patient remains in longer, according as he improves. The full strength is from 2 to 3 per cent. of chloride of sodium, and from ½ to 1 per cent. of chloride of calcium, with carbonic acid. The last named may be supplied artificially by adding equal parts by weight of bicarbonate of soda and hydrochloric acid, the full strength being 1 kilogramme of each in a bath of 250 litres. But much smaller quantities suffice at first.

The exercises consist of various movements of the limbs and trunk, each movement being opposed by an assistant, who gives way as the patient exerts his strength. The greatest care is taken that the patient breathes easily the whole time. The details may be found in Dr. Schott's original article (*Berlin Klin. Wochensch.*, Nos. 33-36, 1885), reprinted as a pamphlet by Schumacher, of Berlin.

The therapeutic results have already been summarized in these columns. Suffice it to say, that diminution of the cardiac dullness during a course of baths can be actually demonstrated, and, as a rule, the improvement in the patient's condition is immediate and striking.

No alteration is made in the solid food, but Dr. Schott has for years restricted the fluid supply whenever high arterial pressure existed. Finally, mountain tours are recommended where there is obesity, but in moderation.

This system of baths and exercise is a rival to Oertel's mountaineering system, and possesses certain advantages in that it can be adopted at home, and can be regulated to a nicety to suit the patient. But Dr. Schott's observations lack the scientific precision of Prof. Oertel's. It is earnestly to be hoped that a more active life may be ordered by medical men generally in the treatment of heart disease. It is to be feared that a merely passive existence is still widely recommended to any unfortunate patients with (mitral) valvular lesion and dyspnœa.

TREATMENT OF THE HYSTERICAL ATTACK.

Dr. Albert Ruault gives a simple method which he had found very efficacious in controlling an hysterical fit. It consists in making firm and constant pressure over the supraorbital nerve at its point of emergence from the supraorbital foramen. The head is held securely between the palms of the hands, while pressure is made over the nerve on each side with the thumbs. The writer says that the patients under this treatment first contract the facial muscles with an expression of pain, cry out, and then take several quick successive inspirations. The breath is held for a few seconds and, then, with a long expiration, the muscles relax and the attack is ended. The pressure of the thumb should now be relaxed, otherwise it may have the opposite effect and excite another convulsion. Pressure over any nerve-trunk at the point where it becomes superficial will have the same effect; but the supraorbital nerves are chosen because of their convenient situation.—*France Médical.*

TREATMENT OF PIGMENT SPOTS OF THE SKIN.

According to Unna, borax and the bichloride of mercury are the medicaments most generally employed for the removal of pigment spots; the first is slow and mild in its action, rarely occasioning eczema; the second acts more energetically and rapidly.

If we desire to have the speediest possible effect, it is necessary to have recourse to mercury, not in the form prescribed by Hebra, which is inconvenient, but a solution of the sublimate in collodion (one half to one part). The danger will thus be avoided of provoking redness, desquamation, and sometimes even a bullous eruption.

These energetic treatments have one inconvenience; we cannot exactly measure the effect. On this account, it is preferable to employ the mercury and bismuth ointment proposed by Hebra. A piece of muslin coated with the ointment will enable us to obtain a more prompt effect than with feeble solutions, besides being much more convenient of application.

Small pieces of muslin, about the dimensions of the groups of freckles of chloasmic spots, should be smeared with the ointment, and after first removing the greasy matter from the surface with cologne or alcohol, they should be applied to the affected parts. The application should be made upon the patient's retiring at night, and washed off the next morning. Bandaging or collodion is unnecessary.

The author prescribes for use during the day a bismuth ointment, which has the advantage of masking the brown spots.

The following is the formula of the ointment:

℞ Oxide of bismuth,
Kaolin..... ..aa 5 grams
Vaseline .....20–40 "

M.

The ointment should be applied only to the pigmented spots, allowed to dry and not be removed for some time.

He also employs the following formula:

℞ Oxide of Bismuth,
Rice powder.....aa 2 grams
Ung. Glycerine..... ..... 10 "
Eau de rose..... ..... 20 gutt.

M.

By alternating the mercurial and bismuth applications, the pigment patches rapidly disappear without redness or desquamation, if the pigment be not so deeply situated in the derma that the remedies cannot reach it without destroying the papillary layer, as is the case in certain chronic chloasmas.

The following is Hebra's formula:

℞ Subnitrate of bismuth,
White precipitate..... aa 2 gr. 50
Lard.....50 grams.

M.

To be spread upon a piece of lint, and applied during the night to the pigmented patch.

Kaposi employs the following ointment in the same manner:

℞ Salicylic acid..... 2 grams
Emolient ointment.....40 grams

M.

Or,

℞ Boracic acid,
White wax.....aa 5 grams
Paraffin ..... 10 " s
Oil of almonds..... 30 "

M.

Frictions with the ordinary mercurial ointments sometimes succeed well.—*Jour. de Med. de Paris*, No. XV., 1886, *Jour. Cutan. and Vener. Dis.*, July, 1886.

MEMORIZING DOSES.

Dr. G. A. Wiggins, of Philadelphia (*Med. World*, August, 1886), gives some general rules with their exceptions, which are thoroughly reliable:

1. The dose of all infusions is 1 to 2 ozs., except infusion of digitalis, which is 2 to 4 drs.

2. Dose of all poisonous tinctures is 5 to 20 minims, except tincture of aconite, which is 1 to 5.

3. Dose of all wines is from ½ to 1 fl. dr., except wine of opium, which is 5 to 15 minims.

Of all poisonous solid extracts you can give ½ gr., except extracts of calabar bean, which is $\frac{1}{16}$ to ¼ gr.

5. Dose of all dilute acids is from 5 to 20 minims, except dilute hydrocyanic acid, which is 2 to 8 minims.

6. Dose of all aquæ is from 1 to 2 ozs., except aqua lauro-cerasus and aqua ammonia, which are 10 to 30 minims.

7. Of all syrups you can give 1 drachm.

8. Dose of all mixtures if from ½ to 1 fl. oz.

9. Dose of all spirits is from ½ to 1 fl. dr.

10. Dose of all essential oils is from 1 to 5 minims.

EFFICIENT SEDATIVE COUGH MIXTURE.

When Dr. H. C. Wood recommends anything, it is a guarantee of its merit. Hence we take the following from the *Therapeutic Gazette*:

℞. Potassi citratis, ʒ j.
Sucai limonis, ʒ ij.
Syr. ipecac, ℥ ss.
Syr. simplicis, q. s. ad. ℥ vj.

M. Sig.—A tablespoonful from four to six times a day.

When there is much cough or irritability of the bowels, paregoric may be added.

DERMATOLOGY.

RINGWORM. (Dr. Henry Brown, Manchester.—*British Medical Journal*). The subjoined formula for the local treatment of ringworm is suggested by Dr. Payne's lecture on the treatment of that epiphytic disease. In sending it I am simply handing down a form received from others, and used in the out-patient practice of the Manchester infirmary, many years before the publication of the British Pharmacopœia. When the acidum sulphurosum was made official, it was used for a time instead, but we had to revert to the old form made up of materials fully recognized and explained in Squire's Companion. The form is: ℞. Sodæ hyposulphitis dr. j; solve in aquæ fl. oz. viij; et adde acidi hydrochlorici fl. dr. j; for outward use only. The use of this lotion, as water-dressing covered with oiled silk, and accompanied by daily washing in soft soap and water, has proved as perfectly satisfactory, as Dr. Payne says the principle of the treatment of ringworm is perfectly simple. It fulfils Dr. Payne's conditions, and kills the fungus. I presume the sulphurous acid gas acts beyond the limits of the aqueous solution.

URTICARIA. (*Lond. Med. Record*). Pilocarpine. In the case of a woman aged 53, suffering from widely spread urticaria, which had invaded the pharynx and caused intolerable itching, M. Piogey at first tried emetics, quinia. belladonna, and hypodermic injections of morphia, without decided benefit. He then injected two-thirds of a grain of pilocarpine, after which considerable improvement took place. Three injections effected a complete cure, and the eruption did not reappear.

REMEDIES FOR SKIN DISEASES IN THE FORM OF SPRAY. (Jour. of Cut. and Ven. Diseases). Dr. Hardaway highly recommends spray as a vehicle in the treatment of affections of the skin. His usual habit is to prescribe a solution of definite strength, from which the bottle of an ordinary handball apparatus is filled, and the patient is then directed to throw the fine spray on the parts affected. Any substance that is "sprayable" either in its liquid form (diluted or pure) or in a state of solution, may thus be employed; *e. g.*, carbolic acid, sulphate of zinc, lotions of grindelia robusta, thymol, liq. picis alkalinus, and fluid cosmoline, (medicated or not). In the case of the fluid cosmoline, the tube of the atomizer should be large. The spray finds its greatest range of usefulness in diseases affecting large areas, and in that class of disorders accompanied by itching and a more or less unbroken cuticle; viz., pruritus, urticari, papular eczema, and the like. In generalized pruritus he had good results from spraying on a lotion of the following sort: carbolic acid three to four drachms; glycerine one ounce; water, one pint. After the bottle of the atomizer has been filled, he sometimes directs the patient to add from five to ten drops of the oil of peppermint. The atomizer-bottle should be thoroughly shaken before the bulb is compressed, in order to diffuse the peppermint through the mixture; otherwise it would float on top.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL SEPTEMBER, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

On the 28th of this month (September) a committee, named at the first meeting of the new Board of Governors held in July last, to take into consideration and put into shape the proposed amendments to the Medical Act, met in Quebec. This committee was composed of the following governors: Drs. Hingston, George Ross, T. A. Rodger, F. W. Campbell, J. L. Leprohon and E. P. Lachapelle, of Montreal, and Drs. Lemieux, Belleau and de St. George, of Quebec. All were present except Drs. Hingston and de St. George. Their sitting was very protracted, extending over twelve hours, but their work was so well and thoroughly done, that when, on the following day, their report was presented to the governors of the College at their regular semi-annual meeting in Quebec, and discussed clause by clause, it was practically adopted without alteration. The changes which have been made and which, if assented to by the Legislature, will come into force after the 1st of January, 1888, are very sweeping in their character. First of all, our already really very hard preliminary examination is increased by the addition as obligatory subjects of Philosophy—(as taught by the books in use in the French and English schools) Physics and Elementary Chemistry. Only one examination will be held each year, and it will take place early in July. The fee will be $10, and either total or partial failure means loss of it all. No money will be returned. Those who fail *partially* will have a supplementary examination in September. A fee of $10 must be paid for this examination. Botany is cut out of the Medical Curriculum demanded by the College. Most likely, however, the Universities will con-

tinue it as before. A Central Examining Board will be formed, and will meet early in April. Laval University desired that this Board should meet in July, as being the time most convenient for her. She, however, has consented to so arrange her course as to terminate in March, and the time for the Central Board to meet will suit every one. The total cast of the Diploina of Membership will then be $50.00, this including the fees for both the Primary and Final examinations. This Board will only meet once every year. The second most important alteration is in the method of electing the Governors. The old plan of proxies is done away with, and each judicial district will, commencing with the next tri-annual election, be conducted by each district in the manner reported upon by a previous committee,and which was published in the Record for July last. The Universities will have, as at present, each two representatives. The city of Montreal and the City of Quebec 4 each. One representative from the Judicial Districts of Montreal, Quebec, Gaspé, Saguenay and Chicoutimi, Rimouski, Montmagny, Beauce, Kamouraska, Terebonne, Joliette, Richelieu, Bedford, St. Hyacinthe, Iberville, Beauharnois, Ottawa and Arthabaska; 2 for the city and district of Three Rivers; and 3 for the district of St. Francis—making in all forty Governors, as at present. Arrangements are made for reciprocal registration with all Provinces having a Central Examining Board.

The semi-annual meeting on the 29th was largely attended. Dr. Hingston, the newly-elected president, presided, and by his excellent chairmanship much expedited the business of the College. Several graduates took their license in course. A resolution was passed unanimously congratulating Dr. Hingston on his election as an Honorary member of the British Medical Association.

OFFICERS OF THE INTERNATIONAL MEDICAL CONGRESS.

The Executive Committee of the International Congress have finally elected the following officers for the Washington Congress of 1887:

President.—N. S. Davis of Chicago.

Vice-Presidents.—W. O. Baldwin of Montgomery, Ala.; Wm. Brodie of Detroit; W. W. Dawson of Cincinnati; E. M. Moore of Rochester, N.Y.; J. A. Grant, Ottawa, Canada; T. G. Richardson of New Orleans; L. A. Sayre of New York; J. M. Tonor of Washington; the President of the American Medical Association; the Surgeon-General United States Army; Surgeon-General United States Navy; Supervising Surgeon-General Marine Hospital Service.

Secretary-General.—J. B. S. Hamilton, U. S., Marine Hospital Service.

Treasurer.—E. S. F. Arnold of New York.

Chairman Finance Committee.—Richard J. Danglison, Philadelphia.

Chairmen of Sections were also elected, but we have not room for their names.

We must confess that as a whole, these names do not appear to be as representative as we would wish. We, however, hope that now all past differences will be forgotten, and that all will work loyally to make the Congress a great success.

THE ORIGIN OF SCARLET FEVER.

Dr. Cameron, of London, England, claims to have discovered the fact that a vessicular disease on the teats and udder of cows is capable of producing, through milk, scarlet fever in the human being. The London *Lancet* says of this discovery: "We have no hesitation in expressing our belief that we are at last brought face to face with the origin of the disease." The British Government have taken the matter up, and it will be fully investigated. It would indeed seem as if we were on the eve of a discovery, only second in its importance, to vaccination.

TORONTO ITEMS.

A new and handsome operating-room has been built in the Toronto General Hospital. It is said to be capable of giving accommodation to about six hundred students.

The Ontario Medical Council is about to erect in Toronto a handsome building for its occupation. When we realize the folly of our perambulating system for our College of Physicians and Surgeons, we may hope to emulate the example of our Ontario brethren. But we fear that time is a long way off. Indications do not show any tendency in that direction now. Just the opposite, if one judges by the temper displayed by our Quebec friends, when it was suggested at the special meeting of the College held in July last, to locate permanently in Montreal.

The profession in Toronto and Ontario generally seem pleased at the information which has reached them, that the new British Medical Act takes away from old country graduates and licen-

trates, the right which they have heretofore possessed of insisting upon registration, without the further examination demanded by the Ontario Medical Council.

The meeting of the American Health Association in Toronto early in October, is a most important event, and we are glad to hear that everything points to a most successful gathering. We hope that Montreal will be well represented.

The Toronto Medical Schools are busy preparing for their winter's work, and the prospect of large classes is excellent. Toronto is working strongly to become the centre of medical education for the Dominion. Some claim it is so already. In our opinion one Montreal School is, by her hospital monopoly, doing much to assist her sister city to attain this end. Montreal must wake up—increase her hospital staffs—and thus her clinical instructors or will soon be compelled to take a back seat.

PERSONAL.

Drs. Hingston, Armstrong, Wood, McConuell, Major and Cameron, of Montreal, who have been in Europe for several months, have all returned during the last few weeks in time to look after their patients, who about the first week in September returned in large numbers from the seaside resorts.

Dr. Blackader, of Montreal, has left for Europe, intending to pass a few months there.

Dr. Ralph Leslie, of Toronto, has been decorated with the order of Leopold by the King of Belgian for his services on the Upper Congo.

Dr. Roseburgh, of Hamilton, was at the meeting of the British Medical Association last month.

Dr. Roddick, Montreal, sailed by the *Parisian* for Liverpool, on the 9th of September, for a hurried visit. He returns early in October.

Dr. Hingston, of Montreal, has been elected an Honary member of the British Medical Association.

REVIEWS.

Clinical Notes on Uterine Surgery. By J. MARION SIMS, A.B., M.D., late Surgeon to the Woman's Hospital, N.Y., &c., &c., &c.

It is with mingled feelings of sorrow and respect for the ever-lamented and gifted author that one takes up "Clinical Notes" upon a branch of the profession in which he was, without question, the foremost exponent of his day. In fact, his brilliant genius may be fairly said to have broken the shackles of superstition which seemed to have attracted the minds of surgeons upon the subject of gynæcology up to his day. As was to be expected, the "Notes" are full of originality and invention, and the author was too great and noble a man to hide any mistakes in working out the great problems to which he was so devoted. The one story of the invention of his speculum is full of instruction, and shows the value of noting with care every fact that comes under our observation.

On menstruation we again see the character of our author, drawing valuable deductions from careful observation. His remarks upon "menorrhagia from fibroid engorgement of the cervix" shows the happy results attainable by the same method. Sponge tents are brought before us with much interest, inasmuch as, after years of experimenting with various forms of tents, the profession has once more, almost unanimously, decided the sponge tents, properly and carefully prepared, as the best, not only for dilating the uterine canal, but also as valuable therapeutic agents in suitable cases. The chapter on uterine polypi is very instructive, and as the writer details the great advances made in gynæcology the story is most instructive and pleasing. The chapter on menorrhagia from uterine fibroids, while interesting, yet fails to give the best and safest of all modes of treatment, in extirpation of the uterine appendages as first performed by Dr. Trenholme, of Montreal, in Jany., 1876.

The chapter on inversion of the uterus gives all that was known at the time, and we notice that the credit of reduction of that organ by pressing in the agles or cornuæ lately given to Nœggerath, had its origin in the inventive genius of our author.

The chapter upon dysmenorrhea is most instructive, and the author's views as to the mechanical causes of this disease are clearly and forcibly illustrated. The extent to which he carries divisions of the cervix would be considered rather heroic in the present day. Notwithstanding, the fear of creating cases for Emmet's operation, yet we think many cases would be benefited by it.

The chapter on abnormalities of the os tincae is very interesting and instructive on account of the rather ultra mechanical views of the author as to terseness.

When treating of the abnormal conditions met with in the cervix uteri, he says that, "if the cervix projects into the vagina a full half inch it is very likely to be associated with the sterile state; if an inch the case is almost necessarily sterile; if it should be still more elongated, say one and a half or two inches, it becomes absolutely so; and if it does not project into the vagina at all, it is equally sterile. Here remarks from such a master are worthy of attention by every gynæcologist, yet cases have come under my own care where the latter condition obtained and the lady was a mother of several children.

Dr. Sims' remarks upon the importance of the cervix uteri being of proper size, form and density are clearly stated, and will be illustrated by cases in his practice. The elongated conoid cervix is specially dealt with as a factor in sterility.

When speaking of uterine displacements as causing sterility many important points are discussed with which every gynæcologist and general practitioner would do well to refresh their memories. The way Dr. Sims illustrates his subject by cases in practice is of all possible ways of teaching the most happy and instructive—not only do we follow with eagerness the actings of his own untrammelled mind, but are taught for ourselves to thus act independently. He asks: "how am I to impress upon minds the truth of my views but by giving them the facts and circumstances that have gradually led my own convictions where I myself find them, without any prejudices or preconceived opinions on the subject?"

When discussing anteversions, the value of shortening the anterior wall of the vagina in special cases is illustrated by cases, in which the success he attained warrants further work in the same line.

Retroversions are treated in a way to discourage the abuse of pessaries, while, at the same time, value of these instruments in suitable cases and with proper precautions are insisted upon.

It is very instructive to note the frank way the author speaks of the origin of his operations for procedentia uteri, and at the same time gives his reasons for the adoption of each. Dr. Sims says: "It is always interesting to watch the slow degrees by which true principles of treatment are established. The idea of narrowing the vagina for the cure of procedentia was first suggested by Marshall Hall, but I do not know that the operation ever succeeded. Then I carried out the principle by cutting away the whole of the redundant portion of the anterior wall of the vagina. This I afterwards modified by simply denuding a large oval surface on the anterior wall and uniting its lateral edges by silver sutures. This was further modified by making a V-shaped scarification and producing a veritable fold in the wall of the vagina. Then I made the V trowel shaped, by turning its upper ends inwards across the axis of the vagina, etc. This was afterward modified by Emmet, who simply narrowed the vaginal outlet at the anterior cul de-sac, and found this to answer the purpose."

Sec. VI. begins with the statement that "the vagina must be capable of receiving and of retaining the spermatic fluid." This assertion, which of course commends itself to our judgment, is enforced by reference to conditions that operate to prevent its accomplishment.

These conditions are illustrated by cases in the author's usual happy way, which enables the reader to gain a closer apprehension of the points brought out than is possible by any other method. The story of his treatment of vaginismus and the steps that led to his method of dealing with this trouble read like a romance, only every point is full of deep interest and instruction. The author's views of treatment for non-retention of the semen in the vagina as a cause of sterility are worthy of attention, and the more so as this is too much overlooked.

Sec. VII. "For conception, semen with living spermatozoa should be deposited in the vagina at the proper time." This, though a well-known fact, is illustrated in the author's peculiarly happy and lucid way in which we see what it costs to work out facts so well-known by students in physiology of the present day.

Sec. VIII. The secretions of the cervix and vagina should not poison or kill the spermatozoa" The various kinds of secretions that prevent conception are dealt with and illustrated by cases which fix the facts in the mind. Many points a e brought out that have been over-looked by m(t writers upon gynæcology and yet which must ad l very greatly to the success of the practitioner : a dealing with many of these most difficult and t ing cases. We commend this volume to the ca :- ful perusal of every student, and feel sure that n o other extant will be more productive of fruitf l results in the advancement of gynæcology.

E. H. T.

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